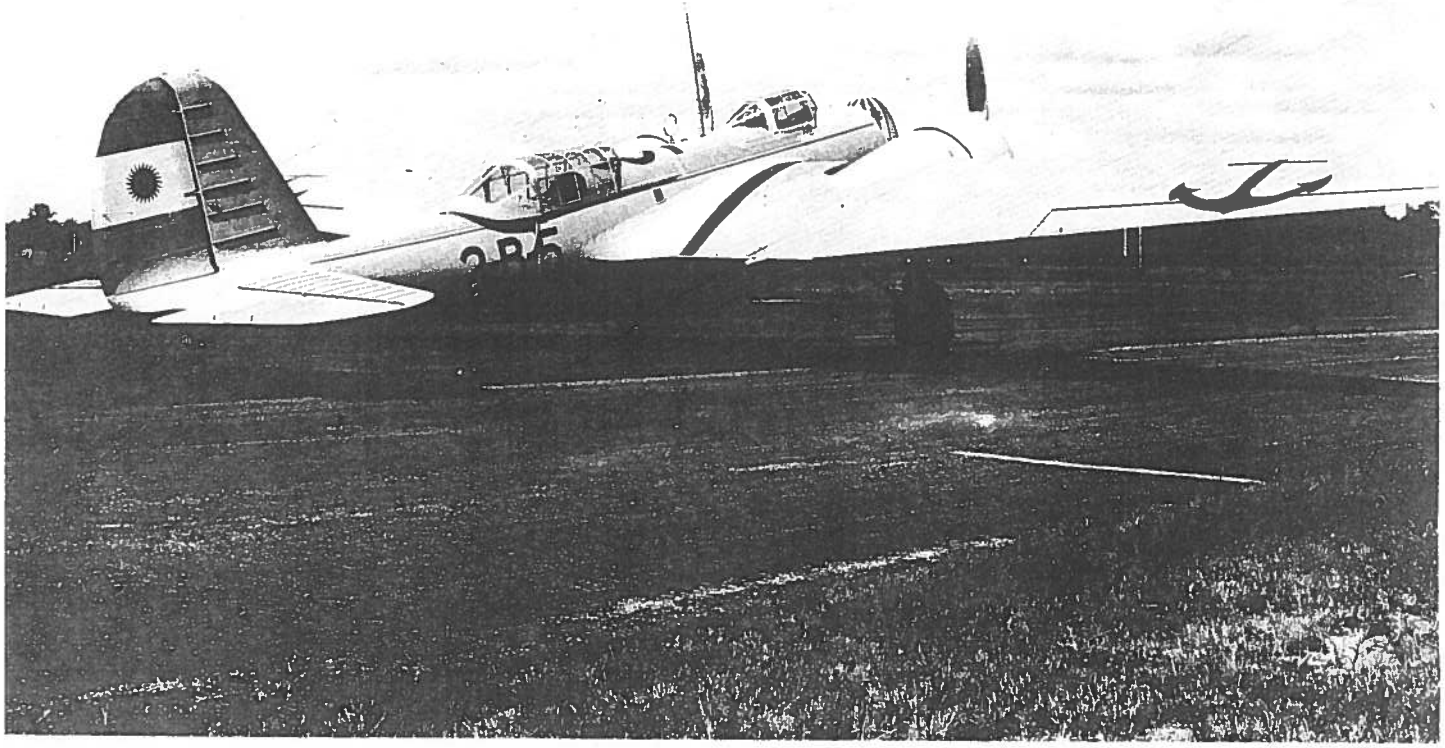
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the newsletter of the Small Air Forces Clearing House

COVER COMMENTS: The photos on our covers both come from Terry Love (SAFCH #229). On the front is a magnificent view of a Martin Model 139 of the Argentine Navy's Bombing Squadron 2, a/c number 5. On the back cover is a "mystery plane" that Terry would like to have identified. Give yourself 5 pts. if you identify the country and 10 pts. for the a/c. The correct (I hope) answer is found below.

FINANCIAL STATEMENT: With 264 members receiving all four issues, income for Vol. 2 was 264 x $3.00 = $792.00. The carryover from Vol. 1 was $35.33, giving $827.33 to spend on Vol.2. Printing costs were $170.42 + $173.00 + $147.30 + $150.93 = $641.65. Mailing costs were 264 x 4 x 34¢ = $359.04 for a total outgo of $1000.69. This leaves a deficit of $173.36 to be carried over to Vol. 3. We have 228 back issues of Vol. 2, the sale of which will substantially reduce this deficit.

BACK ISSUES: Vol. 1 is available only as Xerox copies. Recently, a less expensive source of copies has been found and a copy of the 130 pages of Vol. 1 costs only $5.00.
Back issues of Vol. 2 are available at $4.00 for the set of 4 issues (120 pages). All prices include postage.

NEW MEXICAN AIR FORCE DECALS: Sheet #4 MAF T-33A; 6 national insignia, "recure" arrow, "danger" triangles, and codes JE-003, -010, -012, -015. 1/72 scale.
Still available: Sheets #1 (MEAF P-47) and #2 & #3 (MAF P-47). All 1/72 scale. Price $1.00 per decal including postage. Jim Sanders, 27965 Berwick Dr., Carmel, CA 93923.

SAFO EDITORIAL POLICY: The purpose of the SAFCH is to "promote interest in the history and modeling of the aircraft of the smaller countries of the world". In support of this goal, the SAFO will publish articles on all aspects of aviation (both military and civil) from all periods of time and for all of the smaller countries. To insure that the SAFCH remains a "member oriented" organization, the following guidelines have been adopted: (1) All manuscripts submitted by members will be published in the next available issue of the SAFO. (2) An issue will be published as soon as sufficient manuscripts are on hand to exhaust the money available for that issue. (3) Subscription money will be used only to print and mail the SAFO. There will be no "miscellaneous" column in our budget. And, (4) members are encouraged to sponsor SAFCH memberships for individuals, organizations, and libraries (especially those in countries were US funds are difficult to obtain).

MEMBERSHIP LISTS: To provide more space for articles in the SAFO, a SAFCH membership list will be published only in the last issue of every volume. However, a complete, up-to-date list can be obtained at any time by sending $1.00 to the editorial office. This cost includes surface postage. If you desire air mail delivery, add $1.

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EDITORIAL: *It is fitting that I write this editorial on New Year's Day, for this is the time to look back at the accomplishments of the past and forward to the hopes for the future. Volume 2 marked a period of steady growth and improvement for the SAFCH. We finished the volume with 264 members, up 55 from Vol. 1. Since the membership numbers are up to 315, we had 51 non-renewals and 106 new members joined up for Vol. 2. With 50 copies going to Bill Dean's Books for over-the-counter distribution, our total circulation is 314 copies per issue.*

The SAFO now goes to 121 (89) non-US members in 26 (22) countries. (The numbers in parentheses refer to the number for Vol. 1.) The Netherlands still leads with 16 (15) members, followed closely by Czechoslovakia with 14 (12), England 14 (8), and Canada 11 (10). The list is completed by Australia 7 (1), W. Germany 7 (5), Poland 7 (5), South Africa 7 (0), Finland 5 (3), France 5 (1), Sweden 4 (4), Belgium 3 (0), Mexico 3 (3), Denmark 2 (3), Italy 2 (2), Norway 2 (1), Scotland 2 (2), Switzerland 2 (3), Austria 1 (0), Chile 1 (0), E. Germany 1 (1), Japan 1 (2), New Zealand 1 (1), The Philippines 1 (1), Spain 1 (4), and Uruguay 1 (0). The sponsorship program shows continued strength with a total of 31 (23) sponsored members. New for Vol. 2 was our exchange program with other organizations; namely IPMS-Finland, IPMS-Norway, IPMS-Belgium, IPMS-Netherlands, IPMS-Australiasia, Model-Aire International, and Military Journal.

The four issues of Vol. 2, all mailed during 1977, contained 120 (130) pages. We had major articles on 23 (27) countries, and 12 (14) of our authors could not claim English as their first language. The most significant technical accomplishment has been the working out of an attractive and cost-efficient format for the SAFO.

We have sold a total of 83 Polish decals and 44 Mexican decals. Reduced costs have been obtained for SAFCH members for Canada's Wings, Military Journal, and Project Phantomaire.

Volume 3 should be a period of consolidation, with many more photos and a few more pages planned for each issue. We have already added the SAAF MUSEUM book to our special offers and I hope to add several more decals to our list. A new service for Vol. 3 is the Small Air Forces Sales Service. Finally, if our membership reaches 300 by the end of Vol. 3 we will be doing quite well.

SAFCH Research Project #3 is expanding to include all Latin American fighter a/c. The new title will be FIGHTER AIRCRAFT USED IN LATIN AMERICA, ALL ERAS. (The next installment of this series will feature the F-80. To make this complete photos and marking information is needed on the F-80's used in Ecuador.) Anyone having materials, information, photos, color schemes, etc. of any Latin American fighter a/c please contact Nick Waters III, NARDET Twin Cities, E. 62nd St. & 31st Ave. So., Minneapolis, MN 55450.

SMALL AIR FORCES SALES SERVICE

This new department of the SAFCH will provide SAFCH members the opportunity to purchase books, magazines, photos, and slides on small air force subjects at the lowest possible prices. All profits will go to promoting the SAFCH and its activities. At the current time, lists are available in five areas: (1) Books, magazines, and clippings. (2) Military photos. (3) Civil photos. (4) Miscellaneous photos. (5) Slides. Members interested in this service should write to the SAFSS, specifying one or more areas of interest. You will then receive the current lists in your specified areas as well as all future lists as they become available. Address all correspondence to Small Air Forces Sales Service, Welleweg 4, Brielle 3232AW, the Netherlands.

TAILPIECE: Our "mystery plane" is a Barkley Glow T8P of the Peruvian Air Force.

4 PULK LOTNICZY BY TOMASZ KOWALSKI

Editor's Note: This is the final part of a two-part series on the history, aircraft, and markings of the 4th Air Regiment of the Polish Air Force. The first part, which carried the story up to 1929, appeared in SAFO #4 and is refered to in this present article as "Part 1". In this second part, our author, Tomasz Kowalski, describes the fascinating regiment and squadron badges adopted by the PAF in 1930, clarifies the confusing numbering systems used during this time, and carries the story of the 4th Air Regiment through the tragic days of the September Campaign. It is with greatest pride that the SAFCH presents this unique chapter of aviation history.

REGIMENT AND SQUADRON BADGES

Early in 1930 the Polish Air Force initiated a new system of insignia for its air regiments and squadrons (1). Each air regiment was assigned a different geometric shape to be painted in white on the fuselage of its aircraft. The assignment was as follows:

1 Air Regiment at	Warszawa	triangle
2 "	Krakow	square
3 "	Poznan	diamond
4 "	Torun	pentagon
5 "	Lida	cross
6 "	Lwow	circle

The squadron insignia, painted within the white regiment badge, were standardized according to the nature of the squadron's duties. Fighter squadrons were to use a bird motif, line squadrons an animal (real or legendary), and army cooperation squadrons an insect or reptile (2). School and training dyons all used the letter "T". (In respect to tradition, some squadrons were allowed to retain their previous insignia. For example, the famous Kosciuszko emblem of 111 Fighter Squadron of 1 Air Regiment and the insignia of 121 and 122 Fighter Squadrons of 2 Air Regiment.)

All squadrons insignia of 4 Air Regiment complied with the general instructions. The fighter squadrons (141 and 142) used a pair of wild ducks that differed only in the color of the wings and head (Figs. h and i). Of the line squadrons, 41 adopted a red griffon (Fig. e) and 42 a red elephant. A winged beetle was used by the army cooperation squadrons 43 and 46 (Figs. l and m). In 1933 the two fighter squadrons changed their emblems to a single wild duck as shown in Figs. j and k. These simplified emblems were painted on their new PZL P-7a and also on some of their older PWS 10's.

Since it was the duty of the individual crews to apply the squadron insignia to their aircraft, the insignia differ somewhat in detail from one aircraft to another. For example, some PWS 10's had the squadron insignia painted on both sides (a/c 6 and 7 of 141 Sq. and a/c 14, 15, and 20 of 142 Sq.), while some had the squadron insignia on only one side (a/c 5 of 141 Sq. and a/c 10, 11, 18, and 19 of 142 Sq.), and on some aircraft only the regiment badge appeared. In addition, the regiment badge was often outlined in the squadron color.

COMMANDING OFFICER'S AIRCRAFT

Of special interest are the colorful markings used on aircraft assigned to the commanding officers of the regiment, dyons, and squadrons.

The Potez XXV flown by Col. Władysław Heller while he was commanding officer of the 4th Air Regiment was overall olive-green except for the upper surface of the top wing which was a light blue. On this surface, the large national insignia were overpainted yellow and replaced by asymmetrically positioned, small national insignia. The regiment badge, which appeared on both sides of the fuselage, contained the insignia of 41, 42, and 46 Squadrons (Fig. 10 of Part 1; Fig. a and Photos 1 and 3).

The commanding officer of the Line Dyon flew an aircraft with the regimental badge containing the insignia of both 41 and 42 Squadrons (Fig. c).

The aircraft of the commanding officer of the Army Cooperation Dyon carried a single beetle on its regiment badge, but the left wing was in the color of 43 Sq. and the right wing in the color of 46 Sq. (Fig. b).

The commanding officer of the Fighter Dyon was denoted by an aircraft marked with a white-red-white chevron on the upper wing and a similar horizontal band on the vertical stabilizer (Figs. 12 and 15 of Part 1; Photo 6).

During his tenure as commander of the Fighter Dyon, Mjr. Leopold Pamuła's P-7a carried some very fantastic markings. The entire rear portion of the aircraft was covered with irregular white stripes and the upper surface of the wing displayed a white-red-white "lightning flash" (Fig. 13 of Part 1; Photo 8).

The aircraft of the squadron commanders were distinguished in several different ways. For example, a Potez XXV of 42 Sq. had its wheel disks painted blue, while a Breguet XIX of 42 Sq. had red wheel disks. The PZL P-23 Karas' of the squadron commanders were denoted by the number "1" on the fuselage. In the fighter squadrons, a white-red-white chevron was painted on the upper surface of the wing and a similar diagonal band was carried on the vertical stabilizer. Aircraft of the commanding officers of the army cooperation squadrons of the 4th Air Regiment probably did not carry any distinctive markings.

AIRCRAFT NUMBERING SYSTEMS

The PAF used three distinct systems to identify indiviual aircraft. These systems corresponded to identification within the PAF, "evidence numbers"; identification within the regiment, "regiment identification numbers"; and identification within the squadron, "side numbers".

The evidence number consisted of two numbers separated by a period. The first number designated the type and the second identified the aircraft within the type. The evidence number was painted in black on both sides of the rear fuselage.

The regiment identification number (RIN), introduced in 1936, was composed of a regiment identification letter and an individual aircraft number. The 4th Air Regiment's identity letter was "T". The RIN was painted on the undersurface of the wing in one of two ways:

(a) On aircraft painted overall olive-green, the RIN was white. On the Potez XXVII and XXV and Breguet XIX, the letter was on the port wing between the national insignia and the fuselage. The aircraft number was on the starboard wing in a similar position. On the Spad 61 and PWS 10 fighters, the positions of the letter and number was reversed from that above

(b) On aircraft with pale blue wing undersurfaces, the RIN was in black. The letter was on the port wing and the number on the starboard wing. On the P-7, P-11, and P-23 the letter and number were positioned between the national insignia and the wing tips (Fig. 16 of Part 1;Photo 9). On the Lublin R XIII, the RIN was located between the national insignia and the fuselage (Photo 15).

The side numbers were carried in white on both sides of the fuselage. On the Spad 61, Potez XXV, P-7, and P-11, these numbers were positioned between the cockpit and the squadron insignia. On the P-23, the side number was painted on the vertical stabilizer. Individual aircraft numbers were not painted on the army cooperation aircraft of the 4th Air Regiment. At least in the fighter squadrons, these numbers were the same as the RIN. However, there are examples from 1939 showing fuselage numbers that differ from the RIN (4). These cases probably appeared after mobilization.

An exception to the normal olive-green over pale blue color scheme of the 1930s was the Lublin R XIII with upper surfaces painted in three colors: olive-green, dark earth, and ochre (Fig. 14 of Part 1; Photo 13).

WAR APPROACHES

In 1936, 4 Air Regiment was assigned an experimental unit equipped with an Cierva C.30 Autogyro. This unit, called the "Autogyro Squadron", tested the autogyro under simulated combat conditions and, after reporting that this unusual flying machine was "unfit for combat operations", was disbanded in 1938.

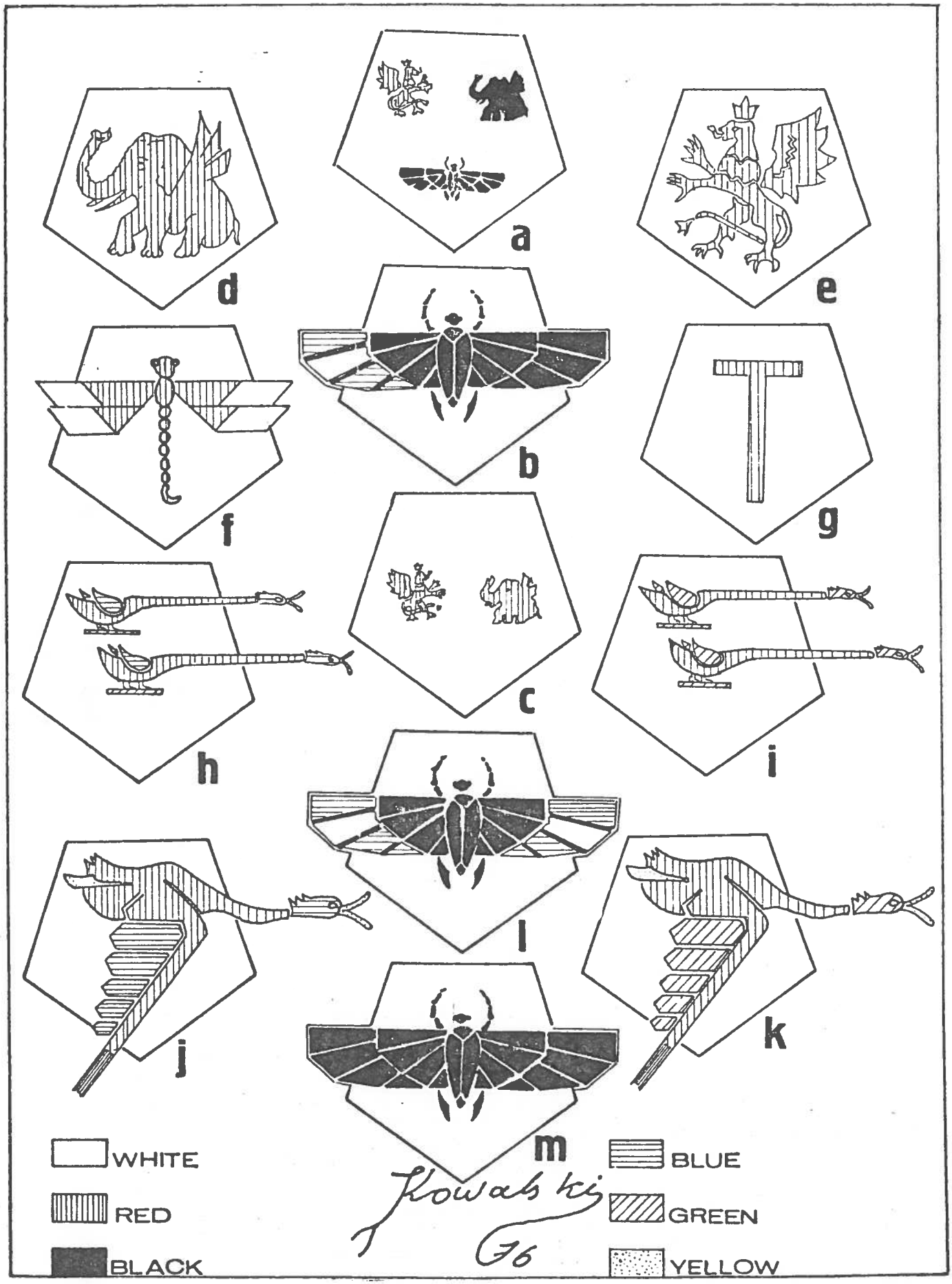
In 1937, 4 Air Regiment became entirely equipped with aircraft of Polish construction: PZL P-11c and P-23, and Lublin R XIII. At this time 4 Air Regiment was part of the 2nd Air Group Poznan. Its six squadrons were organized into four dyons:

I Line Dyon	Sqdns. 41 and 42
II Army Coop. Dyon	Sqdns. 43 and 46
III Fighter Dyon	Sqdns. 141 and 142
School Dyon	

Upon mobilization on 23 August 1939, the squadrons of 4 Air Regiment were assigned to the Armies as follows:

Army Poznan	141, 142, 42, 43, and 46 Sqdns. (45 aircraft)

4th Air Regiment Sqadrons Badges 1931-1939



Army Modin 41 Sq. (10 aircraft)

At first light on 23 August, 41 Squadron transfered to a combat airfield in the vicinity of Czerwony Bor. The remaining squadrons were all located on combat airfields by 31 August. One klucz from 142 Sq., under the command of Lt. J. Czapiewski, remained at Torun for defense of the airfield.

SEPTEMBER CAMPAIGN

1 September 1939. World War II began for 4 Air Regiment at 0600, when Lt. Stanisław Skalski of 142 Sq. shot down a German Henshel Hs 126. This was the second Polish air victory of the war. (The first was a Ju 87 shot down at 0520 by Lt. Władysław Gnys of the 2nd Air Regiment.) 43 and 46 Sqdns. made numerous reconnaissance flights for Army Pomorze.

The first loss suffered by 4 Air Regiment was a R XII of 43 Sq. that was shot down by Polish anti-aircraft defenses. The pilot, Lt. Sabolewski, was killed. This was the first Polish aircraft shot down by Polish defenses and, unfortunately, it was not to be the last.

2 September 1939. 141 Sq. carried out low-level attacks on a German Panzer column, losing four aircraft and three pilots: Cpt. Laskowski (Dyon Commander), Lt. Urban, and Sgt. Mielczynski. This was a costly way to prove the unsuitablity of the P-11 for ground attack against heavily defended targets. Lt. Rolski (5) took over as commander of the Fighter Dyon. During this same day, 142 Sq. destroyed six German aircraft without loss. 42, 43, and 46 Sqdns. continued to carry out reconnaissance flights and 41 Sq. made its first combat flights.

3 September 1939. The Fighter Dyon made a number of reconnaissance flights and also attacked German troops attempting to build a bridge across the Vistula near Grudziadz. In this latter action, three defending German aircraft were shot down. The C in C of Army Pomorze divided 43 and 46 Sqdns. into smaller units:

43/I	platoon to Operational Group of Gen. Drapella
43/II	platoon to Operational Group "East"
46/I	platoon to 15th Troops Division
46/II	platoon to Commander of Army

4 September 1939. Six P-23 Karas' from 42 Sq. made bombing attacks on German Panzer units near Kurow. 41 Sq. continued reconnaissance missions and four aircraft bombed a German Panzer column near Ciechanow. During this day, 41 Sq. received 5 PZL P-42 aircraft (export version of the Karas) bringing their total complement to ten aircraft.

5 September 1939. 41 Sq. continued reconnaissance and bombing missions during which two of its aircraft were lost. The Fighter Dyon transfered to a new airfield near Poczałkowo and immediately got into a hot dog fight over their new base. Four German aircraft were shot down for the loss of three Polish aircraft. Cpt. Lesniewski was badly wounded and his aircraft destroyed. Two other aircraft (Lt. Pisarka and Sgt. Koguta) were so badly damaged that they were written off in landing accidents.

6 September 1939. Two aircraft of 142 Sq. (Lt. Skalski and Cpr. Smigielski) attacked a German column crossing the Vistula near Chełmno inflecting heavy casualties. At 1200 hours, six aircraft of 142 Sq. waded into 14 Ju 87's attacking Polish troops crossing the Vistula at Torun. The German aircraft were forced to jettison their bombs short of their target and lost three of their aircraft. One Polish aircraft was destroyed but its pilot (Sgt. Drybanski) was able to crash land safely on the banks of the river.

This was the last day of independent action by the Fighter Dyon of 4 Air Regiment. On the night of 6/7 September, both fighter squadrons were transfered to Pursuit Brigade. At the same time, 42 Sq. was transfered to Bomber Brigade. 43 and 46 Army Cooperation Squadrons remained with Army Pomorze.

The fighter squadrons of 4 Air Regiment (Dyon III/4) did not take part in any further action after its transfer to Pursuit Brigade. They were transfered from airfield to airfield and, for the most part, were without ammunition and fuel. On 17 September, orders were received to evacuate to Rumania. Thirteen fighter aircraft were flown out.

Meanwhile in Bomber Brigade, 42 Sq. took part in bombing attacks near Rawa Mazowiecka and Rawa Ruska. In time, however, the continuous German attacks on its airfields destroyed all its aircraft. The pilots and navigators were evacuated to Rumania.

41 Sq. continued operational until 12 September at which time it lost the last of its aircraft.

43 and 46 Sqdns. continued to support Army Pomorze, taking part in the Battle on the Bzura until 16 September when its last three aircraft were evacuated to Rumania.

SUMMARY

Aircraft lost by all units of 4 Air Regiment during the September Campaign were as follows:

9	P-11c
18	P-23
5	P-43
11	R XIII

Aerial victories scored by the Pursuit Brigade and the fighter dyons assigned to the various Armies are shown in Table I. Note that the fighter dyon of 4 Air Regiment (Pomorze Army III/4) with 21 victories was the highest scoring dyon for the period up to 6 September when Dyon III/4 was withdrawn from action. Pursuit Brigade scored more victories, but being composed of five squadrons (54 aircraft) its victories per squadron were equal to that scored by the two squadrons (22 aircraft) of Dyon III/4.

The highest scoring Polish pilot of the September Campaign was Lt. Stanisław Skalski of the 4th Air Regiment with 4 ½ victories (6). Lt. Skalski flew P-11c number 66 with RIN T-66 and an unknown evidence number (Fig. 16 of Part 1). The second highest scoring pilot of 4 Air Regiment was Cpt. Mirosław Lesniewski with 3 victories and 5th place in the PAF. (7)

The end of the September Campaign and the evacuation to Rumania did not mark an end to the 4th Air Regiment. The magnificent traditions which began with the Observer's School in Torun after WW I were transfered first to France and then to England were 306 (City of Torun) Fighter Squadron was formed from pilots from 141 and 142 Sqdns. The "wild ducks" of Torun would continue to carry the war to the Germans in the skies over Europe.

TABLE I

Unit	a/c on hand 1/9	a/c lost to 3/9	a/c lost to 6/9	victories to 3/9	victories to 6/9	victories to total
Pursuit Briagde	54	20	38	18	43	43
Army Poznan III/3	21	3	5	10	17	31
Army Pomorze III/4	22	4	9	11	21	21
Army Łodz III/6	22	12	17	8	11	13
Army Krakow III/2	20	3	3	9	10	10
Army Modlin 152 Sq.	10	3	4	4	6	6

TABLE II

COMMANDING OFFICERS OF 4 AIR REGIMENT

Col. pilot	Roman Florer
Col. pilot	Jan Kiezum
Col. pilot	August Menczak
Col. observer	Władysław Heller
Col. pilot	Bolesław Stachon

TABLE III

DYON AND SQUADRON COMMANDERS ON 1.09.1939

Dyon I/4	41 Sq.	Capt. observer	Władysław Chrzanowski
	42		Wacław Walterra
Dyon II/4	43 Sq.	Capt. observer	Władysław Dawidek
	46		Roman Rypson
Dyon III/4		Capt. pilot	Florian Laskowski
	141		Tadeusz Rolski
	142		Mirosław Lesniewski

TABLE IV

4 AIR REGIMENT BASIC EQUIPMENT

1924-1925: LVG C V and C VI; Bristol Fighter; DH 9: Nieuport 10 and 12; Ansaldo A-300 bis, ter, quatro; Albatros C III and B II; Breguet XIV B2 and A2; Fokker D VII and E V; Morane Saulnier MS 30EP.

1925-1930: Potez XV A2 and B2, XXVII A2 and B2; Spad 61 C1; Hanriot HD 14 and HD 28.

1930-1937: Breguet XIX B2; Potez XXV A2; PWS 10, 16, and 18; PZL P-7 and P-11c; RWD 8; Lublin R XIII A, B, and D; Cierva C 30.•

1937-1939: PZL P-23 Karas and P-11c; Lublin R XIII D; RWD 8; PWS 26.

TABLE V

4 Air Regiment and Observer School Aircraft with Known Serial or Evidence Numbers. (Side Numbers or RIN are Known for another 50 Aircraft.)

Type	Factory number	Evidence number	RIN	Squadron number
Ansaldo A 300	300.23			
A 300-4	24517			
Albatros B II	1832/17			11
	2137/17			
	2059/15			90
	1302/17			
AEG C IV	C1728			
Breguet XIV B2		40.47		
XIX B2		60.6	T 17	
	1261			
	1225	60.14		
	1402	60.39		
Bristol Fighter		20.71		
		20.25		
DFw C V	3814			
DH 9		26.17		
		26.13		
		26.14		
Fokker D VII	520/18			
E V	189/18			
	188/18			
Lublin R XIII D	116	56.116		
	118	56.118		
	121	56.121		
	142	56.142		
Nieuport 12	8754			25
LVG C V	3234/17			
	4576/17	9.11		
Morane MS 30	2677			6
	2451			5
	2071			
Potez XV	533	40.77		
	1377	40.21		
		40.5		
		40.4		
		40.3		
		40.2		
Potez XXVII		41.146		
		41.107		
		41.148		
Potez XXV		42.169		
		42.167		
		42.168		
		42.202		
		42.163		
PWS 10	35	5.35		
	74	5.74	T 51	11
PZL P-7	68	6.68		
Rumpler C I	0903/16			11
Salmson 2A2	2435			
Spad XIII	3758	24.13		
SVA 9	273			

PHOTOS

1. Potez XXV of 41 Sq. led by the aircraft of Dyon Commander Col. Heller. (Kowalski)
2. Potez XXV of 42 Sq. (Kowalski)
3. Potez XXV of 42 Sq. lead by the aircraft of Dyon Commander Col. Heller. (Kowalski)
4. Breguet XIX of 42 Sq. (Kowalski)
5. PWS 10 of 142 Sq. with early form of squadron insignia on aircraft "14". (Kowalski)
6. PWS 10 of 4 Air Regiment. Dyon Commander's bands barely visible on wings and vertical stabilizer of lead aircraft. (Kowalski)
7. PWS 10 of 4 Air Regiment. Regiment Identification Number "T" clearly visible on lower surface of wing. (Kowalski)
8. P-7a of 4 Air Regiment lead by Dyon Commander Col. Pamuła's distintively marked aircraft. (Kowalski)
9. P-7a of 4 Air Regiment. Black RIN number "50" barely discernable on undersurface of wing. (Kowalski)
10. P-11c of 4 Air Regiment. (Kowalski)
11. P-11c of 4 Air Regiment. Fourth from left is Capt. A. Chołoniewski who was killed during the September Campaign serving as a staff officer of a Polish Cavalry Brigade. (Halina Chołoniewski)
12. P-23 Karas of 41 Sq. shot down during Sept. Campaign. (via K. Chołoniewski)
13. R XIII of 43 Sq. displaying three-tone upper surface camouflage. (Kowalski)
14. R XIII of 46 Sq. Capt. A. Chołoniewski stands in center (with helmet in hand). Lt. Samalinski, seated in the cockpit, served with 122 Sq. during the Sept. Campaign, escaped to England where he served with 255 Fighter Squadron and was posted missing during the Battle of Britain. (Halina Chołoniewski)
15. Lublin R XIII of 4 Air Regiment. A. Chołoniewski stands directly under the propeller and W.M.C. Samolinski is second from right. The RIN "T 5(?)" is barely visible on wing undersurface. (Halina Chołoniewski)
16. R XIII blind-flying trainer of 4 Air Regiment Training Squadron (Dabrowski)
17. PWS 18 of 4 Air Regiment Training Squadron. Evidence Number 80.7. (Dabrowski)
18. P-7a of 4 Air Regiment. (Dabrowski)

FIGURES

a. C.O. of the 4th Air Regiment.
b. C.O. of the Army Cooperation Dyon.
c. C.O. of the Line Dyon.
d. 42 Line Squadron, 1931-1939.
e. 41 Line Squadron, 1931-1939.
f. Army Cooperation Platoons, 1931-1933.
g. Trainer and School Dyon.
h. 141 Fighter Squadron, 1931-1933.
i. 142 Fighter Squadron, 1931-1933.
j. 141 Fighter Squadron, 1933-1939.
k. 142 Fighter Squadron, 1933-1939.
l. 43 Army Cooperation Squadron, 1937-1939.*
m. 46 Army Cooperation Squadron, 1937-1939.*

* These badges were also used by the Platoons 1934-1937.

NOTES BY THE EDITOR

1. It is useful, at this point, to summarize PAF organization in the 1930s:

 3 aircraft = 1 klucz (flight)
 3 klucz = 1 eskadra (squadron)
 2 eskadra = 1 dyon (wing)
 3 dyons = 1 pułk (regiment)

2. Translation of the Polish names for the squadron duties is somewhat confusing:

 myśliwskie = fighter
 liniowe = line (or attack)
 towarzyszace = army cooperation

 These latter two terms replaced the earlier terms

 rozoznawcze = reconnaissance
 obserwacyjne = observation

3. PAF squadron numbering was coordinated with the number of the parent Air Regiment.

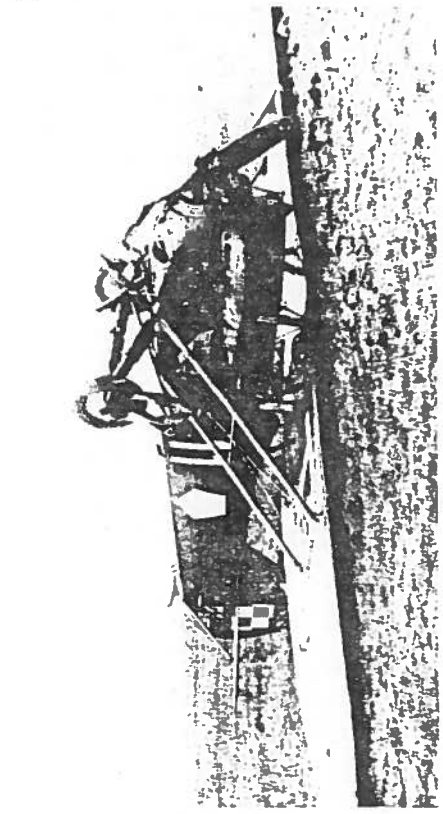
AIRCRAFT OF THE POLISH AIR FORCE'S 4TH AIR REGIMENT



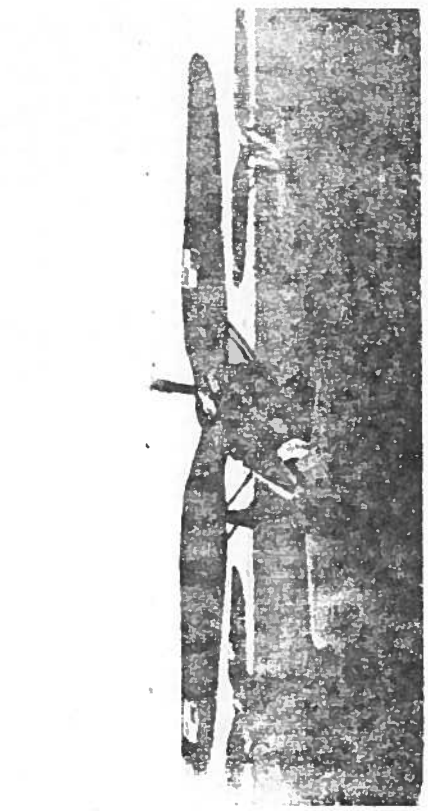
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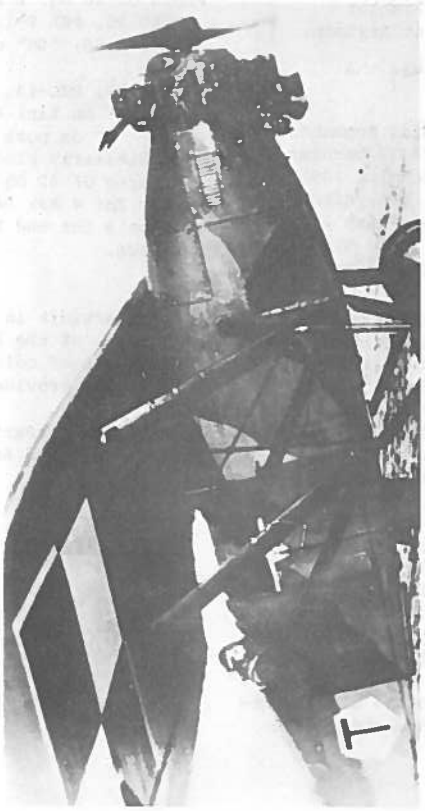


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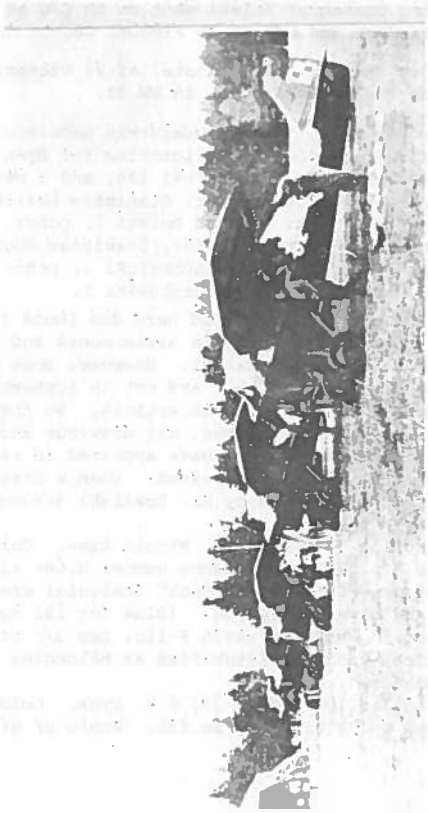
AIRCRAFT OF THE POLISH AIR FORCE'S 4TH AIR REGIMENT



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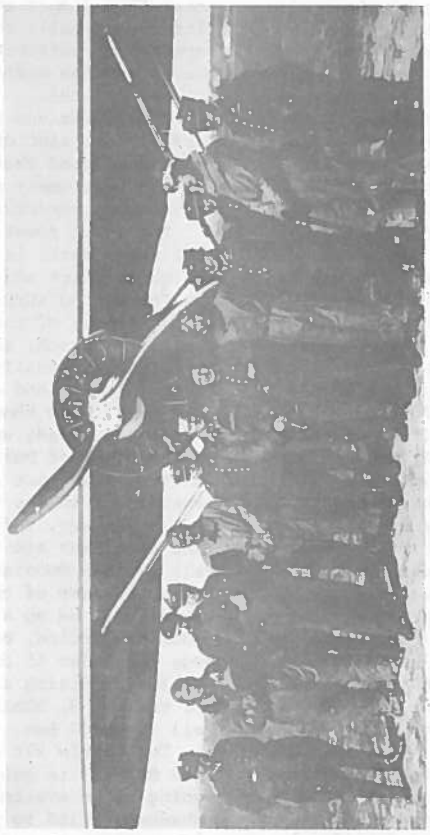
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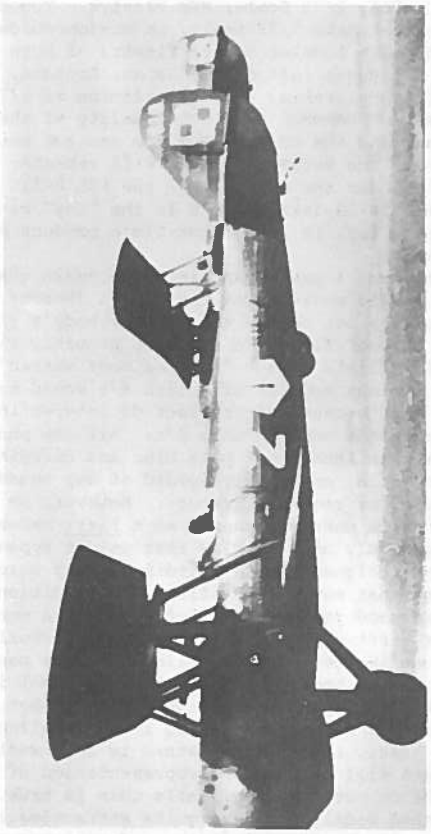
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18

4. A photo on page 135 of Jerzy Cynk's "History of the Polish Air Force 1918-1968" shows a 141 Sq. P-11c during the Sept. Campaign with side number "59" and RIN number "508".
5. Wing Commander Rolski went on to C/O of 306 Fighter Squadron and C/O of 18 Fighter Sector in Great Britain.
6. Mjr. Skalski, with a total of 21 victories, was the top ranked Polish ace in WW II.

7. In his book, "Uwaga, wszystkie samoloty!", Wing Commander Rolski records 20 aerial victories for Dyon III/4 (7 Dornier 217, 6 Junkers 87, 6 Henschel 126, and 1 Messerschmitt 109) assigned as follows: ppor. Stanisław Skalski 6, kpt. Mirosław Lesniewski 3, kpt. Tadeusz Rolski 2, pchor. Karol Pniak 2, por. Marian Pisarek 2, pchor. Stanisław Kogut 1, por. Stanisław Zielinski 1, ppor. Lech Lachowicki 1, pchor. Zygmunt Drybanski 1, and kpr. Stanisław Wieprzkowicz 1.

Photographs presented here and found in the literature support the insignia assignments and numbering systems described by Mr. Kowalski. However, some drawings and captions can be found that are not in agreement with the facts presented in this present article. So that the reader may draw his own conclusions, all drawings and photos of 4 Air Regiment aircraft that have appeared in readily available references will be discussed. When a disagreement exists, the facts presented by Mr. Kowalski are summarized in parentheses.

Profile 75, PZL P-11, Witold Liss. Color profile of P-11c of 142 Sq.; evidence number 8.68; side number "68". Color drawing of "wild duck" insignia; green wings for 141 Sq. and blue for 142 Sq. (Blue for 141 Sq. and green for 142 Sq.) Photo of seven P-11c, two a/c with white-tipped vertical fins are identifies as belonging to "flight commanders".

Profile 104, PZL P-23, J.B. Cynk. Color profile of griffon-marked P-23B with "6" on fin. Photo of griffon-marked P-23B with "9" on fin. Both a/c are identified as belonging to 42 Sq. (The red griffon was the insignia of 41 Sq.)

Profile 231, Lublin R XIII, J.B. Cynk. Photo of 43 Sq. R XIII with black "T" visible on lower surface of wing. Photo of 46 Sq. R XIII.

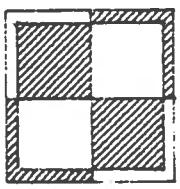
TBU 22, PZL P-11, K. Cieslak. Another color profile of P-11c, 8.68, "68" of 142 Sq. The wings of the wild duck are green.

TBU 19, PZL-23, A. Glass. Color 4-view of P-23B of 42 Sq. White "2" on fin; RIN "N-30" in black on under surface of wing - "N" on port wing between national insignia and fuselage, "30" similarly placed on starboard wing. Both this 4-view and a drawing of 42 Sq's insignia show a red elephant. (The RIN letter for 4 Air Regiment was "T".)

Decals for the Revell P-11c. Aircraft "68" . Wings of duck are blue.

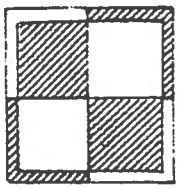
This article is based on one that appeared in the September 1974 issue of the Polish model magazine MODELARZ and included three pages of color drawings. Translation of the present article was provided by the author, Tomasz Kowalski.

Reprints of Part 1 (4 pages) are available for 50¢ surface mail and 65¢ air mail.



POLISH DECALS

334 National, squadron, & personal insignia. Giant 24.5 x 33 cm sheet. Send $4.00 to James V. Sanders 27965 Berwick Dr., Carmel CA 93923, USA.



reviews-reviews-reviews-reviews-reviews-reviews-reviews-reviews-reviews-reviews-reviews-reviews-reviews-

LWS CZAPLA, 1/72 Scale, ZTS Plastyk. You can count the countries that make 1/72-scale, injection-molded kits for the serious a/c modeler on the fingers of both hands and still have 4 fingers left over - Japan, England, USA, France, Italy, and Czechoslovakia. (The restriction to 1/72 scale is only to prevent arguments about the quality of the products of East Germany and the USSR.) Now you can add one more to this list - Poland. The veteran modeler will remember the releases from Poland under the name RUCH - the PZL P-11C and P-23A Karas, and the TS-11 Iskra - were in the "toy" category. The Czapla is not a toy, it is a first-class product of the modeling industry.

At first I was disappointed to learn that the first new kit from Poland would be of the Czapla (Heron). This a/c was definitely not on the top of everybody's list of the "ten most wanted" kits. In fact, it probably wasn't even on most people's lists of the "hundred most wanted" kits. Even, the most serious modeler of Polish a/c would not rank the Czapla very high because of the lack of interesting color schemes and markings used on this a/c. All the photos I've seen show the a/c in khaki over pale blue and carrying only the national insignia; completely devoid of any squadron insignia, a/c numbers, or regiment numbers. However, on further thought, the Czapla does make sense as a first release by a new firm. It certainly does display that unique appearance of pre-WWII Polish-designed a/c; a certain elegant purposefulness of design that says "I'm Polish". In addition, the designers showed good judgement in not choosing a more popular a/c for their first effort. This way they can build up experience and confidence before tackling the more popular subjects.

From the photos of the completed model in SKRZYDLATA POLSKA, I was expecting a good model. But, when I opened the box, I was surprised; it is an excellent kit. Molded in dark khaki, the surface detail is outstanding. (Some reviewers will critize the representation of the fabric surfaces for being out of scale; while this is true, the effect on the finished model should be quite attractive.) The molding is sharp, almost free of flash, and contains all the details we have come to expect from the best companies. The prominent bulges on the engine cowl are well represented - remember that FROG didn't even try to do these on their Fokker D-21. Interior detail, consisting of floor boards and seats, is sparce but sufficient. The only area of the molding I can fault are the machine gun and the pitot tube which will have to be replaced.

The dimensions and shape check out well with the 1/72-scale drawings in SAMOLOTY WRZESNA 1939. These drawings also provide some good sketches for detailing the Czapla, particularly the instrument panel, machine gun, and the complicated pitot tube structure.

The decal sheet, consisting of 6 national insignia and the LWS trade mark, is well reproduced. However, they appear to be quite thick and may need to be replaced.

The second surprise is the excellent instruction sheet. The history of the Czapla appears in 4 languages (Polish, English, French, and German). The instructions rely entirely on clear and easily understood symbols. Color information, both interior and exterior, is given in 4 languages and a 4-view drawing shows the placement of the decals for a series-built a/c. Most welcome is the inclusion of the HUMBROL equivalents of Polish Khaki (M26 + 1/6 M31) and Pale Blue (M65). I am most anxious to compare this khaki with the variety of shades that have appeared in various publications.

In summary, the new kit of the LWS Chapla from Poland is and excellent kit that deserves a place in the collection of all serious modelers. I encourage you to go out of your way to obtain one of these kits; not only because the finished model will be an attactive, attention-getting addition to your collection, but because every kit sold will help encourage the Poles to come out with more kits of their a/c. With Heller promising a P-11C and a Karas, I suppose we can dream of the RWD-8, Lublin R-XIII, PWS-26, P-7A, P-24, and most of all the P-37 Łos.

The Czapla kit is marked at 48 złoty, but I have no idea how much it is going to cost in the West, or even if it is going to be available outside of Poland. Don't take any chances, write to your friends in Poland immediately to request one or more kits. If you don't have a correspondent in Poland, you should consider sponsoring a SAFCH membership for someone in Poland.

From Martti Kuivalainen (SAFCH #282) comes a listing of Finnish-produced decals along with several sample instruction sheets. Martti's list and his comments follow, but first I would like to make a few comments of my own. The quality of these decals is excellent, their accuracy is unsurpassed, and even MICROSCALE could learn something from their instruction sheets. These large 21 x 30 cm sheets give (in English) a brief, but complete, history of the a/c in Finnish service, accurate color information, and photos of 6 or 7 a/c with detailed and informative captions. And this is just one side. The other side contains full color side and plan views of all the a/c that can be made using the decals provided. The instruction sheet alone is worth half the price of the decals. Now to Martti's letter:

"I inclose here a listing of Finnish decals. Borje Hielm, who has done most of these sheets, says that the only place in the USA where all SL decals are always available is GATEWAY HOBBIES INC, 62 West 38th St., New York, NY 10018. European SAFCHers can order these sheets from Borje Hielm , Bergsidan 4, 02160 Westend, Finland. Prices: Sheets 1,2,6 and 7 cost here about $0.50; sheets 13 and 14 about $1.00; and sheets 15-26 and 29-30 about $2.00; and sheets 27 and 28 about $2.50. I don't know how much they cost in the USA.

"Sometimes these SL decals have broken when I have put then into water, and I recommend painting them with clear varnish, matt or gloss depending on the time when the a/c was used.

"Those numbers missing from the list are either for 1:18 wooden flying models or have been replaced with later sheets.

SUOMEN LENNOKKI - DECALS 1/72

1. National insignia 1939-1945 (Swastika) 4 x 100 cm, 2 x 80 cm, 2 x 60 cm.
2. National insignia 1945- (cocardes) 4 x 100 cm, 2 x 80 cm, 2 x 60 cm, with black border.
6. Five Finnish AF Fighters 1940-1945. Nat. ins. 4 x 100 cm, 2 x 62 cm; codes 2 x each: HC-460 (Hurricane I), MS-624 (Morane 410), GL-274 (Gladiator II), MT-501 (Bf 109G-6), CU-580 (Hawk 75A-2); others: 2 x HLeLv 34 insignia (crow) for MT-501's tail, 2 x yellow "1" for MT-501 fuselage, 2 x white "O" for CU-580's tail.
7. MiG-21F and MiG-21UTI, Finnish AF 1963- . Nat. ins. 4 x 72 cm, 4 x 50 cm; codes 2 x each black MG-92, MK-103; also 2 x each black numbers 0,1,...,9; others: 2 x HavLLv 31 insignia (lynx), 2 x red warning triangles.
13. Douglas DC-3, Karhumaki Airways (Kar-Air) 2 x OH-VKC for wings, 2 x red-white-black stripes for fusleage + text "Karhumaki Airways", 2 x tail codes OH-VKC; also text "Finland". Note: 1:92, for Monogram model.
14. Douglas DC-3, Finnair. 2 x OH-LCE for wings, 2 x blue-white-stripes for fuselage + text "Finnair". 2 x tail codes OH-LCE, also text "Aero Oy". Note: 1:92 for Monogram model.
15. Bristol Blenheim I and IV, Finnish AF 1937-45. Nat. ins. 4 x 160 cm, 6 x 100; codes 2 x each BL-104, BL-129; others: PLeLv 48 insignia (devil riding bomb), 2 x PLeLv 46 insignia (bison). Colour painting instructions (=CPI).
16. Dornier Do-17Z-2, Z-3. Finnish AF 1942-48. Nat. ins. 4 x 100 cm, 2 x 85 cm, cocardes 4 x 85 cm, 2 x 72 cm; others: 4 x PLeLv insignia (bison) two of which are on square white background, small text in Finnish (beware of propellers, etc.), 4 x ace-of-spades insignia; codes 2 x each DN-52, DN-55, DN-60, DN-64. CPI.
17. Brewster 239. Finnish AF 1940-48. Nat. ins. 6 x 85 cm, cocardes 4 x 72 cm; codes 2 x each, BW-375, BW-373, BW-354, BW-366, BW-377, BW-384; others: instrument panel, 2 x HLeLv 24 insignia (lynx), 2 x elk insignia, name "Noka", victory markings; tail numbers: 2 x each white 3, white 6, yellow 6, black 1. CPI.
18. Junkers Ju-88A-4. Finnish AF 1943-48. Nat. ins. 4 x 100 cm, 2 x 68 cm, cocardes 4 x 75 cm, 2 x 50 cm; codes 2 x each JK-253, JK-257, JK-260, JK-251, JK-268: cthers: tail numbers 2 x each white 1, white 4, white 4, white 5. (Two x fuselage codes 4D+AK, 2 x KG 30 insignia for a Ju-88A-4 which operated from Kemi in northern Finland, 1942. This a/c is not included in CPI.) CPI.
19. National Insignia 1918-1938 (80-100cm). 20 x 100 cm, 5 x 95 cm, 5 x 90 cm, 5 x 85 cm, 18 x 80 cm.
20. National Insignia 1918-1938 (10-80cm). 12 x 80 cm, 6 x 75 cm, 6 x 70 cm, 6 x 65 cm, 6 x 60 cm, 6 x 55 cm, 8 x 50 cm, 8 x 40 cm, 8 x 30 cm, 16 x 20 cm, 16 x 10 cm.
21. National Insignia 1939-1945 (80-100cm). Same as 19.
22. National Insignia 1939-1945 (10-80cm). Same as 20.
23. Petdjakov Pe-2, Pe-2FT Finnish AF 1941-45. Nat. ins. 9 x 100 cm, 4 x 75 cm; codes 2 x each PE-211 - PE-217, PE-301 (for all FAF a/c); others: 2 x instrument panels, 2 x white "A" for PE-211's tail, 1 x PLeLv 48 insignia (devil riding bomb). CPI.
24. Messerschmitt Bf 109G-6, G-8 Finnish AF 1944-54. Nat. ins. 4 x 100 cm, 2 x 72 cm, cocardes 4 x 72 cm, 2 x 50 cm; codes 2 x each MT-408, MT-422, MT-433, MT-453, MT-462, MT-482, MT-500; also 4 x each numbers 0,1,...,9; others: 2 x HLeLv 33 insignia (crow), 2 x HLeLv 31 night-flight insignia (bat), shark teeth for MT-422, tail numbers yellow 3, yellow 6; fuselage numbers yellow 7, yellow 1, white 1, white 5, white 6, white 11, small text CPI, history, photographs.
25. Tupolev SB-2, SB-2bis, SB-3 Finnish AF 1940-45. Nat. ins. 4 x big (160 cm??), 2 x fuselage; codes for all FAF SB's; others: ship victories, submarine victories, LeLv 6 insignia (duck); CPI, history, photographs.
26. Hawker Hurricane I, IIb Finnish AF 1940-45. Nat. ins. 4 x 100 cm, 2 x ca. 75 cm; codes HC-451, HC-452, HC-465, HU-460, HC-458; 2 x each numbers o,1,...9; two each 1,2,3,5,7; others: personal marking for Keikki Kalaja's Hurricane; tail numbers 1,2,5; also markings for Soviet "Wolf of Viena", 6 x red stars, 2 x text "For Stalin", 2 x white wolf, 2 x white 60, 2 x serial BM959; CPI, history, photographs.
27. Same as 26, but to 1:32. CPI, history, photos.
28. Same as 24, but to 1:32. CPI, history, photos.
29. Curtiss Hawk 75A Finnish AF 1941-45. Nat. ins., codes, tail numbers, Stalin's-face insignia, sharl teeth for CU-557. Black and white painting instructions, photographs.
30. Morane 406 and 410 Finnish AF 1940-45. Nat. ins., codes, tail numbers, victory markings, personal markings of Capt. Kalimo (11 victories), "dragon", B/W PI, history, photos.

Comments: 6. codes for MS-624, HC-460(?), and GL-274(?) should be black/green. S.I.H. #4 MORANE 406, page 62. On page 68 there is a drawing of MS-624 in winter camouflage and with white "1" on rudder. Of HC-460 I am not quite sure; in Aircan S.2 "FAF 1918-68" there is a photo of it, starboard, and the code is black. And maybe it was black on port side too. And of GL-274 I haven't ever seen a good photograph. 24. The background of national insignia should be light grey, not white. The difference between 19, 20 and 21, 22 is that during 1918-38 the national insignia blue was much darker than 1939-45. Note: The swastika was changed to a roundel 1.4.1945, not immediately after the Continuation War (which ended 4.9.1944). This fact is often incorrectly published, e.g., in Aircam S.2, which by the way, I think must be one of the books that competes for the honor of having the most faults. This book by Aircam managed to get in over 100 errors!!! These errors are corrected in SUOMEN SIIVET 2/ and 3/1971, unfortunately only in Finnish.
26. The Russian a/c: On the starboard side there should read "For the Homeland", and on the port side "For Stalin"
24. I have suspicions of MT-422, but nothing sure. Borje Hielm said it never had the shark teeth and the bat insignia at the same time, and he should know, he flew the a/c in 1948! But, if possible, I am going to do some research on this a/c and this may result in an article for the SAFC Till then, look in S.I.H. #6 and do some other a/c.

"Could you print for me an ad for Italian and French pen-friends to exchange kits, decals, books, etc. I can also pay money is desired. Does the SAFCH have a Yugoslav member? I am interested in Yugoslavian F-86s and P-47s." *Martti Kuivalainen* Etelaranta 4A, 96300 Rovaniemi 30, Finland.

The SAFCH is arranging to make these decals available to its members; all that remains is to settle on a price. However, if you can't wait, write to Borje Hielm.

FLYVEVABNET
(THE ROYAL DANISH AIR FORCE)

The Danish Air Force celebrated its 25th anniversary in 1975, for October 1, 1950 was the day on which the new Air Force took over the responsibility for the air defense of Denmark.

The Air Force did not start from scratch. There was both somebody and something to form the basis and this "somebody" was app. 1400 men from the Army Aviation (Haerens Flyvetropper) and the Naval Aviation (Sovaernets Flyvevaesen) and this "something" was an aircraft strength of 180 of which 24 were jet aircraft.

The real buildup of the Flyvevabnet took place in the period 1950-1955 and the organizing was at that time naturally based on the geographical conditions. Under the Flyverkommandoen (Air Command) there was formed one Flyvebasiskommando (Sub Air Command) on each side of the Storebaelt (The Great Belt). Flyvestation (Airbase) Kobenhavn, Vaerlose and Avno under Eastern Flyvebasiskommando and Flyvestation Alborg, Karup, Skrydstrup, Tirstrup and Vandel under Western Flyvebasiskommando.

The squadrons which were transferred from the Army and the Navy were now brought into the NATO numbering system and received the numbers 721, 722, 723, 724 and 725. Later on ESK 726 (Eskadrille=Squadron) in August 1952, ESK 727 in November 1952, ESK 728 in May 1953, ESK 729 in September 1953 and ESK 730 in January 1954. Last but not least a Photoreconnaissance-flight was formed in January 1955 and when the number of Eskadrilles was reduced in 1960, it received full Squadron status and became ESK 729.

The 180 aircraft which the Flyvevabnet possessed at the start consisted of 9 KZ-II, 10 Chipmunk, 37 Oxford, 28 Harvard IIB, 2 Harvard III, 5 Harvard T-6, 32 Spitfire Mk. IX, 3 Spitfire Mk. XI, 19 Meteor Mk. IV, 5 Meteor Mk. VII, 6 Proctor, 2 KZ-III, 9 KZ-VII, 1 B-17G, 6 Sea Otter and 6 PSY-5 Catalina. As one can see the aircraft were a very mixed composition which marked the fact that they were bought from Allied surplus. While these aircraft and others, especially the Meteor, Chipmunk and Firely which entered service in the beginning of the fifties, were bought by national means, the American Military Assistance Program began to leave its mark on the inventory from 1951 on. On August 28, 1951 the first F-84E were delivered. These were followed, in 1952, by a number of F-84G which had a more powerful engine. A total of 238 F-84E/G's were received through the MAP.

MODERNIZATION

The most important step in the modernization before 1960 was the development of the Early Warning system. Compared with the electronic environment of today this manual directed net of radars could seem to give too long a reaction-time and too many unsecure moments, but it must be remembered that aircraft were slower in those days.

ESK 724 received the nationally-procured Hunter Mk. 51 and 53 (Interceptor Day Fighter) while ESK 723, 726 and 728 received MAP F-86D (All Weather Fighter) and the Photo-flight received MAP RF-84F. ESK 725, 727 and 730 were re-equipped with MAP F-100D/F (Fighter Bomber Attack).

At the same time the SAR-squadron and the Transport-squadron received new aircraft: Pembroke and S-55C which - apart from three Bell-47 primarily were used in Greenland - were the first helicopters in the RDAF. The TCP-squadron (721) received C-47, C-54 and PBY-6 Catalina.

The still growing number of aircraft and the introduction of new types meant that the efforts to improve flight safety had to be enlarged. This was done by the formation of the Traeningsflight (Training Flight).

A very important part of the MAP was that from 1951, the Danish pilots, after elementary training at Avnø, were educated in the USA and later for a period in Canada. As there is a big difference in flying in the USA and Denmark - especially the weather conditions are different - the pilots were able to gain confidence with the Danish conditions in the Traeningsflight (TFL) before they started the much more demanding education in the combat squadrons. The TFL which was formed at Alborg in 1956 and in 1966 moved to Skrydstrup (As Traeningseskadrillen (TRESK)) had a very positive impact on the RDAF loss-rate. The type used was the T-33A of which the RDAF received 30 on the MAP.

On its 10th anniversary the RDAF had 285 aircraft on inventory of which 85% was piston-engined.

THE 1960's

The year 1960 was a turning point for the RDAF. At the 10th anniversary the CINC was Lieutenant-General Kurt Ramberg. He could - like the rest of the personnel - look back with pride on a short span of years with an almost explosive development which made the RDAF an equal part of the defense of Denmark with close coordination to the other arms.

But in that year a new Defense Bill came into force which meant a serious reduction in the strength. The number of combat squadrons was reduced from 8½ to 7 and at the same time the number of aircraft and pilots per squadron and the pilots flying hours per year were reduced. Of course this can't happen without hampering the standard of the pilots.

The early sixties, however, also fortified the RDAF when in July 1962 the existing missile-defense was transferred from the Army. The squadrons in question were four NIKE Hercules and four HAWK squadrons. This was a rather essential rationalization as the missile and the fighter defense now could be coordinated through the same command.

The strength of the RDAF was nominally very much reduced by the Defense Bill but in another way it was fortified as the modernization of the aircraft and group equipment was continued.

The F-86D squadrons were replaced by the F-104G (29 were delivered as MAP-aircraft). Also the SAR-squadron received new equipment as the S-55 in 1965 were replaced by the much bigger, long-range S-61. Apart from a considerable improvement of the SAR-duty it also meant a further rationalization as the S-61 are able to do both search (which up till then the Pembroke and the Catalina did) and rescue.

Through most of this period from 1962 to 1970 the CINC was Lieutenant-General Hans Jorgen Pagh.

NEW CUT-DOWNS

The result of the Defense Bill of 1969 was that new drastic reductions on the defense appropriations which among other things meant that the RDAF had to retire all kinds of personnel.

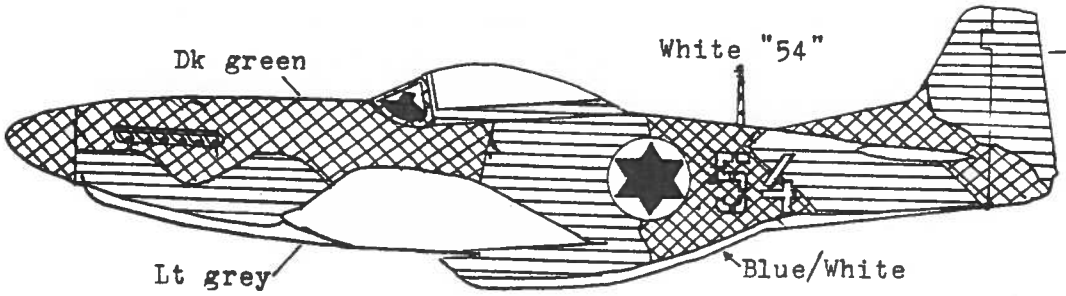
The reductions also had consequences for the command structure. The commands of the three arms were reduced and a combined command was established (Forsvarskommandoen - The Defense Command).

One of the cut downs was the disbanding of the Traeningseskadrillen (Training Squadron). The sqd, as already mentioned, did a lot for a safe transition from the pilot education in the USA to squadron service. The RDAF are not all back to the situation when the sqd was formed. The T-33A's are now at the Station Flights (Karup and Vaerlose) and the combat squadrons are equipped with a number of 2-seat versions. Another cut down was the disbanding of the ESK 724 in 1974 equipped with Hunters.

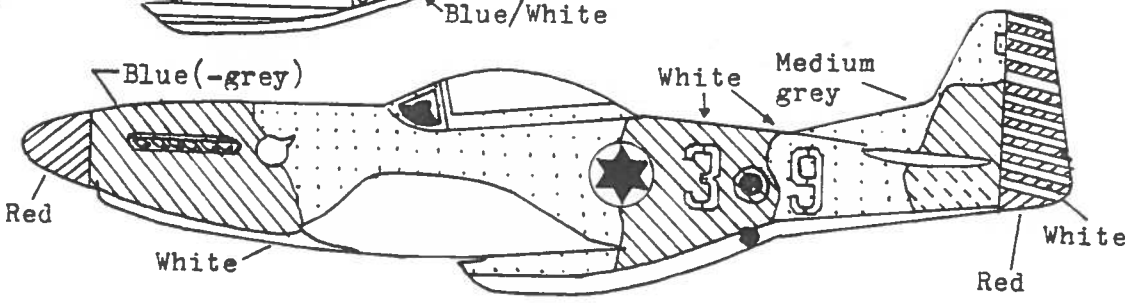
There have also been a few bright spots and among these the procurement of the Swedish Draken (F/RF/TF-35) which replaced one F-100 sqd (ESK 725) and the RF-84 sqd (ESK 729). Three new transport aircraft (C-130H) were delivered in 1975 to replace the C-54. Finally 32 SAAB-MFI-17 Supporter (T-17) are being delivered to replace the Chipmunk, KZ-VII and L-18C.

Bjarne Sorresiig (SAFCH #145)

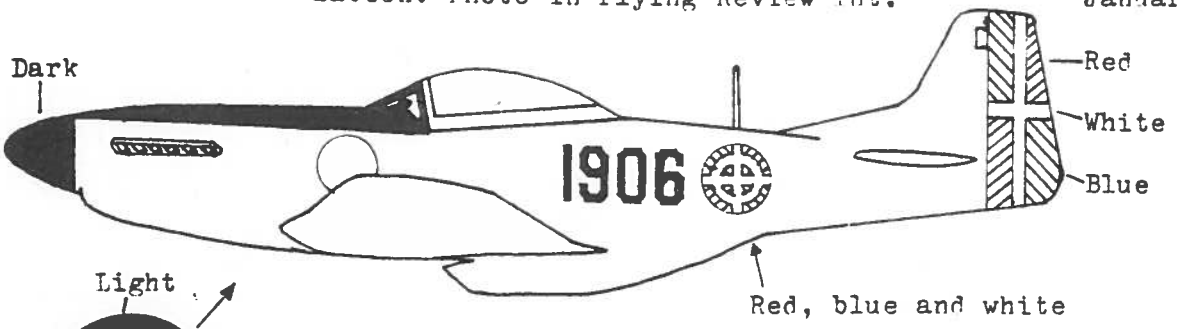
EX-SWEDISH MUSTANGS (J26) LA 8-75

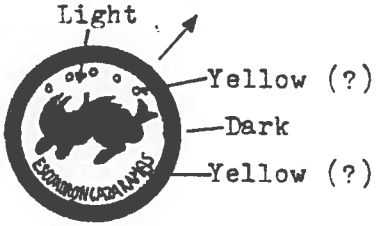


Photos, Allt om Hobby 4/1967

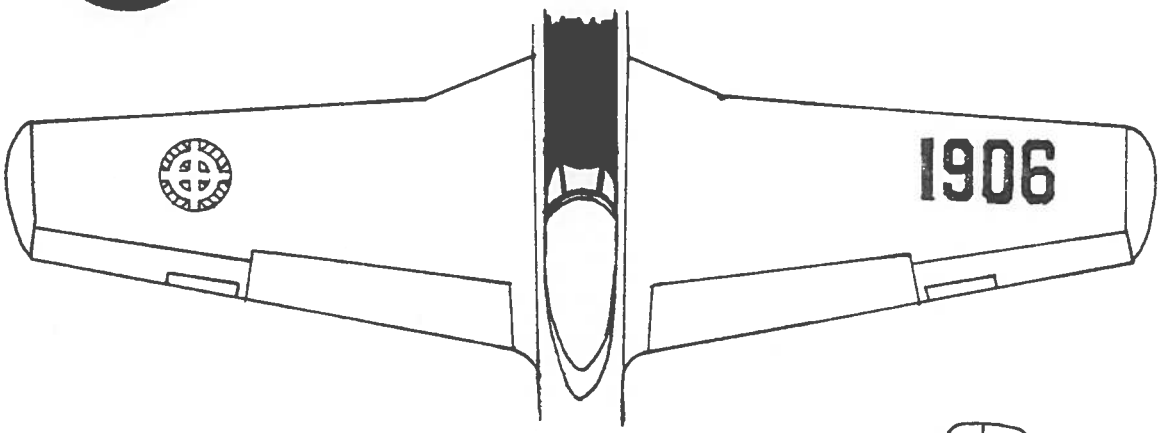


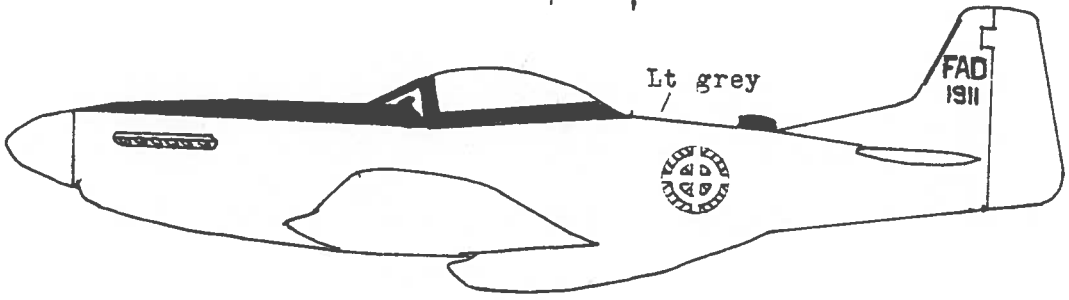
Ex-J 26, according to FRI preserved in Israel. Note camera installation. Photo in Flying Review Int. January 1968





Mustang serving with Escuadron Caza Ramfis, Dominican Air Force, circa mid-50s
Photos in Ett år i luften 1964





No. 1911 in later style of marking
Photo in Kontakt no. 12/13

From Tom Arheim (SAFCH #228) comes a little booklet advertising his scale-plan series. The complete series of drawings of Norwegian a/c are included, but they have been reduced from their original 1/72 scale to fit on to 6 by 8 inch pages. However, this presentation is more than sufficient to show the first-class quality of these drawings. An up-to-date list of Tom's drawings follows:

501 Fairchild Cornell PT 26
502 Gloster Gladiator Mk I
504 Sikorsky H 19D-4
505-510 F-86F Sabre
511-512 North American Harvard
513-514 Lockheed T-33A
515-517 Northrop N-3 PB
518-519 De Havilland DHC-3 Otter
520-521 T-1 Kjeller trainer
522-523 General Dynamics F-16

All drawings are of Norwegian a/c. These drawings are available at 3.95 Swedish crowns each plus $1.50 postage to US; from SPECIALTRYCK DEKALER, Box 5223, 402 24 Goteborg, Sweden. (Or, you may wish to chance the special SAFCH offer described in SAFO #8.)

Also from Tom Arheim comes news that IPMS-NORWAY is producing a 1/48-scale vacuum-formed kit of the Northrop N3PB float-plane patrol bomber of WW II. Price is $7.50 US including postage. Make check or money order payable to IPMS-NORWAY and send to Tom Arheim, Asperudveien 11, Oslo 12, Norway.

AVIATION YEAR 1976, Ducimus Books Ltd., De Worde House, 283 Lonsdale Rd., London SW13 9QW, England. Available from the publisher and all good aviation bookshops at £ 4.50 or US $12.50, plus postage. A4 size, 120 pages crammed with color and b&w photos and information. A yearbook that will soon become a collector's item. Some of the many topics covered: Retrospect '76, The Military Scene, Soviet Air Power, General Aviation, Homebuilts, Air Museums, Veteran & Vintage, Farnborough '76, Airline Year, Space, Records, Stamps, and Films. *Fritz Braun* SAFCH #220.

"THE SAAF MUSEUM is the first ASA monograph and was published on September 29. Its author is Flt/Sgt Dave Becker (an ASA member), who has worked for the Museum since April 1976. He has put together in this 32 page book the history of aircraft preservation in South Africa from its early beginnings after the Second World War right up to the present time, with the Museum now firmly established under the capable leadership of Colonel McGregor. The monograph contains 20 photographs and a complete list of all aircraft (structurally complete or otherwise) with the Museum at the moment, with the individual histories of each. A complete list of other aircraft components held by the Museum, for example engines, is also included. The monograph is very good value at 60 cents (£ 0.50 for overseas members) and can be ordered from the Sales Department. Overseas members please note that payment is best made by either IMO, or by uncrossed UK postal orders. All prices include postage." The above article comes from the November 1977 issue of the Aviation Society of Africa's Newsletter and was written by Andy Heape. Thanks to the generousity of the ASA, the museum book can be ordered from the SAFCH at a cost of US $0.80 plus 30¢ postage. You'll probably find this much cheaper than obtaining a IMO for £ 0.50. And, for most members the delivery time from California should be much less than that from South Africa. Send orders to: Jim Sanders, 27965 Berwick Dr., Carmel, CA 93923.

From the August '77 issue of the ASA NEWSLETTER comes the following announcement: "SCALE MODELERS!! Now available through the ASA is a 1/72 scale SAAF decal sheet. On an A5 size sheet it features current 'castle' markings, numerals etc. and comes with a data sheet on markings and colours. Price: R1,30 or US $1,50 equivalent overseas. Orders to ASA Sales, PO Box 50413, New Redruth, 1452, South Africa." This decal sheet is outstanding. It contains 63 national insignia in 7 sizes, 16 "BLY AF KEEP OFF" inscriptions, 2 each of "SOUTH AFRICAN AIR FORCE", "S.A. AIR FORCE", "SUID AFRIKAANSE LUGMAG", and "S.A. LUGMAG", and 10 sets of numerals in two sizes. The instruction sheet is a virtual encyclopedia of information on current SAAF markings and camouflage; e.g., "On the aircraft with even serial numbers the english title appears on the starboard side with the afrakaans title on the port side as a general rule, and vice versa." Colors are referred to BS.381C colour specification. (Would one of our English members please tell us how to obtain BS.381C.) Half the sheet is devoted to a table listing for all active SAAF a/c types the size of all insignia, fin flash, and serials. The ASA has provided a number of these decals for the SAFCH to sell directly to its members. The price has gone up since the above announcement first appeared, but at $1.75 including postage they are still a terrific buy. As long as the first batch lasts, I can get these decals off to you by return mail. Send orders to: Jim Sanders, 27965 Berwick Dr, Carmel, CA 93923.

From John Corsair (SAFCH #30) comes review issues of 3 aviation magazines from "down under": AUSTRALIAN FLYING, NEW ZEALAND WINGS, and AIRCRAFT - Australasia's Complete Aviation Magazine. While it is dangerous to make a judgement on a single issue of each magazine, AUSTRALIAN FLYING seems to contain much more that will interest the average SAFCHer. Anyway, here is a break down of the contents of the issues received:

AUSTRALIAN FLYING May/June '77 (68 pages): "RAAF Air Show '77" (7 photos including RAAF Neptunes, F-111C, Mirages, 2 Iroquois - one in UN markings destined for Ismailea, Egypt, and a MB 326H of the Roulettes Formation Aerobatic Team); "The First Blood" (2 pages of text and one photo of RAAF Hudsons, story of the attack on the Japanese invasion fleet off Kota Bharu on 8 December 1941. The report of 15,000 Japanese killed in this attack seems more like war-time propagada than historical research);"Point Cook Air Show" (9 photos including a color shot of a Hudson FX o F and Wirraway BF o F on loan to the RAAF Museum, and b&w photos of RAAF Sikorsky S-51 A80-374 and Army Nomad A18-303); "Navy Trackers Back on Deck" (photo coverage of loading S2G Trackers onto the MELBOURNE at San Diego and the delivery to Nowra Air Station - the first time RAN Trackers have operated off a carrier since 1971. The 12 photos include one of S2E '849' that was repaired after being damaged in the disasterous fire at Nowra NAS. The S2Gs were chosen by a RAN Survey & Selection Team at Davis-Monthan AFB and photos include the YS2G '333' still in the markings of the Naval Research Laboratory and,a real treat for the marking buffs,several S2Gs with the colorful tail markings of US Naval squadrons and Australian military roundels. Examples include '153532' NH of VS-37 from the USS KITTY HAWK - with a Canadian flag on the landing gear cover.); "Holland's Aviadome" (one of a series on European Air Museums - 8 pages, 10 photos). Subscription - 6 issues for A $8.00 to Yaffa Publishing, 432 Elizabeth St., Surey Hill, 2010, Australia.

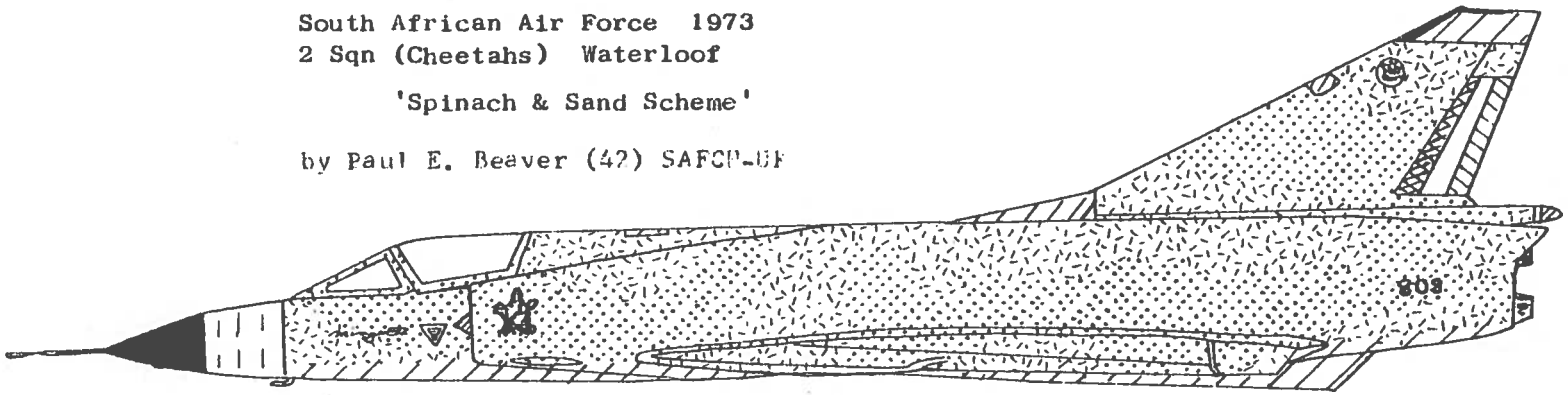
NEW ZEALAND WINGS May '77 (36 pages): "CT/4B Airtrainer - NZ's Military Pilot Trainer" (4 pages, 1 color photo and 4 b&w photos); "Strikemasters Modernize Military Pilot Training" (2 pages, 2 photos); "Agricultural Directory - Current Types and Operations" (6 pages, 19 photos - NZ's ag aviation, includes photo of two Cessna Agwagons joined a la P-82 to produce a Cessna 288B Twag); "Underwater Aircraft Recovery Project" (1 page, 1 photo of progress in attempting to recover a TBF that went into the sea in 1944); "Photowings - RNZAF Ohakei of the mid 1950's" (8 photos of RNZAF a/c - DH 104 NZ1801, Oxford NZ2155, P-51D NZ2406, Mosquito FB.6 NZ2338, Vampire FB.52 NZ5725, TBF-1 NZ2503 in yellow & black target-tow scheme, DH 89B Domine NZ524, and Dakota NZ3351. Subscription - 12 issues A $7.00 to all countries, PO Box 1963, Christchurch, New Zealand.

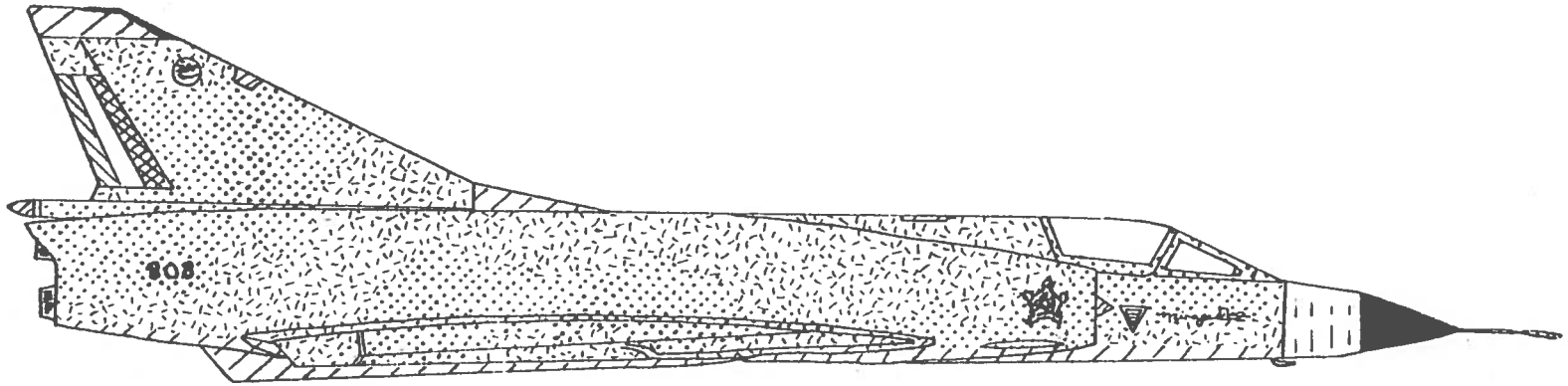
AIRCRAFT July '77 (60 pages): "'77 Paris Air Show", "World Round Up"; "Vintage Album" (photo DH 53 VH-UAC and DH 71 VH-UHN). Subscription, 12 issues A $12.72, 61-73 Flinders Lane, Melbourne, Victoria, 3000, Australia.

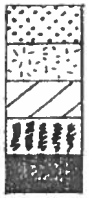
MIRAGE IIICZ
South African Air Force 1973
2 Sqn (Cheetahs) Waterloof

'Spinach & Sand Scheme'

by Paul E. Beaver (42) SAFCP-UF







Dark Green
Sand
Light Blue/grey
Burnt Metal
Black



Dark Blue
Orange
Silver
Red
White



"Cheetahs" Badge
2 Squadron, SAAF



SAAF
Insignia

Ref: Air Erthusiast 1973 & own notes/photos

© PE Beaver August 1974

AVIATION-MARINE
Nov. '76: 110 A-7 Corsair II starting 1978 for Pakistan; 110 F-5E Tiger II for Saudi Arabia; 40 extra F4E Phantoms for Turkey.
Dec. '76: Last 2 Australian GAF Nomad delivered to Indonesia making total of 6 (equipped for coastal surveillance operations); color photo and article Argentine AF Pucara. Article and photos Cairo parade 6 Oct 76 (6 pages).
Jan. '77: Photo Aeritalia G.222 Dubai Air Force; 21 F5E Tiger II for Singapore; F5E Tiger II for Philippines. Article Egyptian Air Force (6 pages).
Mar. '77: 100 MiG 23 for Iraq; 3 EMB-326 Xanante for Togo; 36 Sukhoi Su-20 Fitter C for Peru; 10 SF 260 Warrior for Irish Republic.

JP4 MENSILE DI AERONAUTICA (In Italian)
Apr. '75: Norman Defender (7 pages, photos Oman & Abu Dhabi; Spanish Mirage IIIEE (5 pages); Fiat F-86K (4 pages, color side views - Luftwaffe, Dutch, Norwegian, & Italian)
May '75: Heil Ha'Avir (8 pages); Draken (drawings & color side view - Denmark, Sweden, Finland)
Jul./Aug. '76: Danish AF Part I; Side views of I-153 - Russia, Finland, & China).
Sept. '76: Danish AF Part II; 3 b&w photos of Brazil P-47.
Dec. '76: Italian AF P-51 (7 pages); Spanish AF (6 pages).
Feb. '76: Squadron 221 Spanish AF (3 pages); Spanish I-153 (2 pages). Compiled by *John Corsair* SAFCH #30

AVIATION SOCIETY OF AFRICA NEWSLETTER. Subscription US $5.50 for 12 issues. Better yet, sponsor a SAFO subscription for an ASA member and get the ASA NEWSLETTER free; send $4.00 and I'll work with the ASA to find someone for you to sponsor.

Sept. '77 (24 pages). Photos: Sikorsky S-55 CR-ALO and DH-89A CR-AAU; Zambian AF DC-6B GMB-112; Sudan Airways F-27 ST-AAS; Zambian Air Cargoes L-100-20 9J-REZ; Moroccan Govt. Gulfstream 2 CNA-NL; Court Helicopters Sikorsky S-58 ZS-HFZ; SAAF Harvard 7703; Zambian Airways HS.748 9J-ABJ.

Oct. '77 (20 pages). Photos: Angolan Skyvan CR-LJF; Air Gabon Cargo DC-8 TR-LVK; Cessna Cardinal ZS-JYO; Beech Queen Air CR-LLW; USAF EC-135N; Central African A/W Viscount VP-VNB; Angolan Yak-40 D2-EAG. Airport Report, Blantyre, Malawi; Air Malawi; Insignia (7) Rhodesia.

Nov. '77 (20 pages). Photos: Zaire Viscount 9Q-CBS; SAAF Transall '335', Alouette 3 '631', Bosbok '930'; Rhodesian AF C-47; Bahrain Gulfstream 2 A40-AA; Seychelles Trislander VQ-SAN; Insignia (8) Nigeria.

Dec. '77 (24 pages). Photos: Air Malawi Viscount 7Q-YDK and Islander 7Q-YKC; Trislander ZS-OYF; Seychelles Islander S7-AAA; Sikorsky S-55 WV203; SAAF Vampire T55 '276' in new blue and white colour scheme; Angolan C-47 CR-LDK. Insignia (9) Niger.

Each issue has the following regular features: African Airline News, Military & Government Aviation, Registration Review, Accident Report, Airport Movements, and African Bussiness Jets.

FLYVEHISTORISK TIDSSKRIFT. In Danish. Subscription 4 issues 50 kr to Hans Kofoed, Sankt Markus Alle / 3.4, 1922 København, Denmark.

#4 1977 (12 pages). "IVR: Fokker GI" (8 pages, 8 photos, 2 page cut-a-way, artist sketch of GI in Danish markings). Photo of Danish Spitfires F.M.S.m1 and F.M.S.m2.

IPMS-AUSTRALASIA MODELCRAFT. Subscription $8.00 US by surface mail and $12.00 US by air mail (recommended due to magazines being lost in mails) to IPMS-AUSTRALIASIA, PO Box 1187K, GPO Melbourne, Vic. 3001 Australia.

#4 1976 (16 pages). "Indonesian Sabre" (3 pages, 2 photos, 1 page drawing, Indonesian and RAAF serials). "Australian Jet Assisted Take-Off Catalinas" (8 pages, 6 photos, 3½ pages of drawings).

#1 1977 (16 pages). "RAAF's Swingin' Wing" F-111C (6 pages, many photos and sketches). "Bunny II" O-1 operated by Australian Army (2 pages, 2 photos, 1 drawing).

IPMS-BELGIUM KIT. In French. For subscription information write to Jean-Pierre Timmermans, Av. Gounod 87, 1070 Bruxelles, Belgium.

#26 "Fairey - Britten Norman Islander BN-2A" in Begium service (8 pages, 4 photos, 3 pages of drawings). Excellent article; a good mix of data for the modeler and the historical buff. (While not 'air force', there is an excellent article on Liberty Ships including plans in 1/600, 1/700, and 1/1200 scale.

BOOK BARGAINS from Publishers Central Bureau, Dept. 514, 1 Champion Ave., Avenel, NJ 07131.
THE INTERNATIONAL ENCYCLOPEDIA OF AVIATION. Ed. by D. Mondey. Over 1200 photos and illus., 300 in full color. The most detailed, profusely illus. international reference on every aspect of civil, military, and space aviation from the earliest planes to jets of the future. A treasure-house of info. on the world's top air forces, airlines, airports, incl. glossary to technical terms, more. 13 x 9 3/4. To be published at $30.00. For a limited time only $24.95.
THE ILLUSTRATED ENCYCLOPEDIA OF THE WORLD'S MODERN MILITARY AIRCRAFT. By B. Gunston. 670 photos and illus. 360 in full color. Examines all major combat planes in service today, plus many being developed or built. Over 200 entries each with detailed drawings, photos, and text. Incl. fighters, bombers, reconnaissance aircraft, anti-submarine aircraft, transports, tankers, more. Extra value import only $9.98.
THE HISTORY OF THE R.A.F. By J.W.R. Taylor. Over 300 illus. many in full color. Thorough analysis of the RAF from its humble origins as a reconnaissance unit to the vital part it played in WW II and after. Incl. Battle of Britain, problems of cooperation with the US, Britain's postwar role in Korea, Suez Crisis of 1956, Indonesia in the 1960's, more. Extra value import only $9.98.
Arco-Aircam Aviation Series: FINNISH AIR FORCE 1918-1968. Over 200 photos and illus., 50 in full color. A complete history of the Finnish Air Force from formation to 1968. Softbound. Pub. at $2.95. Only $1.00.
ENCYCLOPEDIA OF THE WORLD'S COMBAT AIRCRAFT. By B. Gurston. Over 500 scaled drawings. Many in full color. Complete technical directory of major warplanes incl. the Sopwith Camel, Spitfire, Stuka, B-17, P-51, MiG, B-52 and the supersonic planes of today and tomorrow. Hundreds of aircraft described. Special only $9.98.
COLOR PROFILES OF WORLD WAR I COMBAT PLANES. By G. Apostolo & G. Begnozzi. Photos, 392 illus., 365 in full color. Magnificently produced volume with detailed history of the great planes of WW I, incl. Fokker, Caudron, Sopwith, Nieuport, more. All the specifications, detailing, pilots, flight patterns, armaments and ornaments. Extra value import only $9.98.
Famous Aircraft: NAKAJIMA Ki.27. By R.M. Bueschel & R. Ward. 195 photos & illus., 45 in full color. Fully illus. story of the famous fighter plane that wreaked havoc across the war-torn skies of the Pacific during WW II. 7 1/4 x 9 3/4. Softbound. Pub. at $2.95. Only $1.00.
FIGHTING AIRCRAFT OF WORLD WAR ONE AND TWO. By a staff of acknowledged experts. Hundreds of photos & illus., many in full color. A comprehensive account of aircraft design and armament, combat techniques and military applications used in air warfare by both Allied and Axis powers, incl. some vivid first-hand accounts of missions and discussions of the moral implications of war methods that reached, during the two world wars, an unprecedented level of destructive power. 9 x 12. Extra value import only $9.98.
WAR IN THE AIR: Pictorial History of WW II Air Forces in Combat. By G. Gurney. Over 1250 illus. Thrilling combat photos many from secret government files show every plane used by all sides during WW II, every major engagement, many human interest photos, plus informative text. 8 1/2 x 11. Only $5.98.
(Editor's Note: I didn't write this drivel; this is the way they are described. But, there are some good bargains here.)

DIE FLUGZEUGE DER SCHWEIZERISCHEN FLIEGERTRUPPE SEIT 1914, Urech, Verlag Th. Gut & Co, 1974. 361 pp, 21 x 26 cm: Have you been looking for a small air force scheme for a Siemens Schuckert D-III? Or maybe scale plans for that other DH-5 (the one built by Hafeli)? Or, plans for those pugnacious-looking Dewoitine parasol fighters? Or, how about the development history of F+W's elegent C-3600 series of aircraft? Or, maybe you are simply interested in the serials carried by all the aircraft of the Swiss Air Force from the Bleriot XI (#22) of 1914 to the Mirage IIIS (J-2301) of 1974? Well then, this is the book for you as well as for anyone else interested in the Swiss Air Force.

Each aircraft type used by the Swiss AF is covered on two pages - one with a photo and table of data and the other with a excellent scale drawing. Each subtype gets its own treatment. For example, the Fokker D-VII appears seven times and the C-3602/5 thirteen times. Sometimes it takes a pretty keen eye to spot the difference in the drawings. The data includes technical specifications and operational information (including numbers used, period of service, and serials). Part of the page is devoted to a brief history. Most of the photos show the aircraft in Swiss markings but a few of the WW I types are shown in German markings (presumably interned aircraft).

Of interest to SAFO readers is the photo of the Siebel Si-204 coded B-3. This is the aircraft flown to Switzerland by the Grandmufti of Jerusalem as recounted in the last SAFO.

The book costs 40 Sfr (about $15) and considering the excellent quality of the photos it is a good buy.

The new INTERAVIA DATA service includes the title "Air Forces of the World" advertized at 400 Swiss Francs for a one-year subscription. Intrigued as much by the high cost as by the possible usefulness to SAFCH members, I wrote to INTERAVIA requesting further information.and received the following gracious reply: "This survey has been compiled specifically to meet the requirements of the aircraft industry (airframe, engine and equipment manufacturers), air forces and government agencies. In view of this, and the fact that no photographs are included, it may not be of great interest to your readers. We are, however, enclosing documentation on the survey in question plus specimen pages and details of subscription terms and rates. The basic edition has just been published in two volumes (approx. 450 pages). It is proposed to issue four updatings to this during the next twelve months."

The sample pages were well chosen, representing one large and one small air force. French Air Force, Army and Naval aviation is covered in 7 typed pages. The coverage of Singapore takes a little more than a page Other volumes currently available in this series are: European Non-IATA Airlines, Aircraft Armament, Military Avionic Equipment, Current Aircraft Prices, International Organizations, Aircraft Production, Airlines in Australasia and Oceania, Scheduled Airlines in Europe - North Africa - Middle East, European Airports, Civil Jet Transport Avionic Equipment, and Airlines in Latin America.

Anyone interested in any of these titles should write INTERAVIA DATA, PO Box 162, 1216 Geneva - Cointrin, Switzerland.

--letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-

"The new Tracker supplied to the Royal Australian Navy in spring of 1977 are in fact S-2G's (not S-2E's as mentioned in SAFO V2 N3). The Royal Australian Navy has supplied the following information on the S-2E Trackers destroyed at Nowra:

CODE	SERIAL	FATE	NEW CODE
840	N12-153595	Destroyed at Nowra	-
841	N12-153596	" " "	-
842	N12-153597	In Sydney during the fire	842
843	N12-153598	Saved from the fire	841
844	N12-153599	Destroyed at Nowra	-
845	N12-153600	Saved from the fire	843*
846	N12-153601	Destroyed at Nowra	-
847	N12-153602	" " "	-
848	N12-153603	" " "	-
849	N12-153604	Saved from the fire	840
850	N12-153605	Destroyed at Nowra	-
851	N12-153606	" " "	-
852	N12-153607	" " "	-
853	N12-153608	Lost at sea 10/02/75	-

*843 may be used as a ground airframe only.

NB: All S-2E's saved from the fire received superficial burns, especially to their upper surfaces. The replacement fleet of S-2G's will be serialled N12-15233:844 etc.

NB: N12-153608:853 although an S-2E was the last Tracker to be built - S-2G's were all modified to that standard during USN service." *Paul Beaver* SAFCH #42

"All the Li-2's used by LOT (Polish Air Lines) had girls' names, each name beginning with the last letter of the registration, e.g., SP-LAB 'Baska'. I already have identified 18 of these names and it would be useful to have the remainder. Those I shall need are: SP-LAA, LAC, LAM, LBB, LBC, LBE, LBF, LBG, LBH, LBK, LKA, LKB, LKC, LKD, LKE, LKF, LKG, LKH, LKI."

Juraj Rajninec (SAFCH #98), Dlhe Hony 1923/B, 911 01 Trencin, Czechoslovakia.

" In Vol 1, No. 4, page 106, Lennart Andersson asked for a translation to the Amharic inscription that appeared on the fuselage of an Ethiopian (then Abessynian) Potez 25. I passed this inquiry on to the people at Ethiopian Airlines in Frankfurt/Main and got the following answer. The text, which runs from left to right, would be written in Latin letters as this:

NISRA | LASOFE | WOSSEN



This is the name of a native Abessynian bird."

Fritz Braun SAFCH #220

"I wrote to Bruce D. Hoz of Papua, New Guinea for information on the PNG Defense Force. Bruce is with the Air Museum of PNG. He supplied the following:

PNG SERIAL	C/N	TYPE	EX RAAF	EX-USAAF
P65.001	16361/33109	C-47B-30-DK	A65-100	44-76777
P65.002	16129/32877	C-47B-30-DK	A65-84	44-76545
P65.003	15197/26638	C-47B-15-DK	A65-67	44-49377
P65.004	15689/27130	C-47B-20-DK	A65-68	44-49869

"I have seen a photo of one of these aircraft with a blow-up of the insignia but for the life of me cannot find the pertinent magazine.

"I just completed a tour of exchange duty with the Royal Australian Navy and have some information on that service that I plan to submit to SAFO at a later date.

"I always look forward to the SAFO. Keep up the good work." *Jack Long* SAFCH #63

JSDF/AF SERIALS

The JSDF/AF serial is formed by six digits; two separated from four by a hyphen. The first digit in the first block indicates the fiscal year in which the a/c was acquired. The first digit in the second block indicates the mission. The second digit in the first block designates the type of plane within each mission. The last 3 digits denote the order in which the plane was acquired.
For example, in 81-0416, the 8 tells that this a/c was acquired in 1958, the 1-0 tells that it is a piston-engined trainer of the 1st type (AT-34A), and the 416 indicates that it was the 116th a/c of this type acquired (you have to know that the 1-0 serials began with 301).

FIGHTERS

Type	serial
F-86F	All batches are not known, unfortunately, but the following planes have been reported: 82-7835 92-7869 12-7000
F-86D	Only the 84-8103 example is known for now.
F-104J	16-8501 26-8502/8511 36-8512/8552 46-8553/8680 66-8681/8687 76-8688/8710
F-4EJ	17-8301/8302 27-8303/8310 37-8311/8334 47-8335/8358

RECCE. FIGHTERS

Type	serial
RF-86F	Only planes reported are: 52-6404 (1) 52-8404 (1) 52-8401 62-8424 (1).- Perhaps the given planes were the same one at different dates, after the serial was changed !.
RF-4EJ	47-6901/6902 57-6903/6914

PISTON ENGINED TRANSPORTS

Type	serial
C-46D	51-1101/1116 61-1117/1136 91-1137/1148. Ex Chinese Nationalist

TURBOPROP. ENGINED TRANSPORTS

Type	serial
YS-11	42-1051/1052 52-1151/1152 62-1153/1154 ? 82-1155 92-1156/1157 02-1158/1159 12-1160/1162

JET ENGINED TRANSPORTS

Type	serial
C-1A	18-1001/1002 38-1003 48-1004/1005 58-1006/1007 58-1008

JET ENGINED TRAINERS

Type	serial
T-33A	41-5001/5009 51-5010/5068 51-5169/5170 61-5171/5219 71-5220/5312 81-5313/5378

Vampire T-55 63-5571. Single example

T-1A	85-5801/5802 95-5803/5806 05-5807/5815 15-5816/5838 25-5839/5846
T-1B	05-5847 15-5848 25-5849/5864 35-5865/5866
F-104DJ	26-5001/5011 36-5012/5019 46-5020
T-2A	19-5101 29-5102/5104

PISTON ENGINED TRAINERS

Type	serial
T-34A	41-0301/ 0357 51-0358/0387 61-0388/ 0396 71-0397/ 0415 81-0416/ 0435
T-6G	72-0152. This is the only one I have ever spotted.
T-28D	63-0581. Single example

HELICOPTERS

Type	serial
H-19D	Only the following choppers have been spotted : 81-4703 01-4712
S-62AJ	33-4770/4771 43-4772/4773 53-4774/4775 63-4776/4778
KV-107-II	74-4801/4802 84-4803/4806 94-4807/4812 04-4813/4815 24-4816/4817

S.A.R. PLANES

Type	serial
Mu-2S	73-3201/3202 83-3203/3204 93-3205/3208 03-3209/3212 13-3213/3214 23-3215/3216

This report is not complete, so any correction/addition will be welcome by the author.

Jose Luis Gonzalez Serrano
General Rodrigo, 3, 1 ºC
Madrid-3. SPAIN

letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-letters

"In regard to the article on the Gabonese Air Force which appeared in issue #7, I can make some additions and corrections to the drawings. The top stripe of the fin flash is not black; the correct color sequence from top to bottom is green, yellow, blue. The badge shown on the YS-11A is the State Coat of Arms with two black panthers holding a shield with a sailing ship, etc. You can find this emblem in any good lexicon of flags and coats of arms. A good photo of this emblem is to be found in Japanese paperback on the YS-11 (Ching-Chiku-Rin Publications). I bought mine from Airline Publications and Sales Ltd., Noble corner, Great West Road, Hounslow, Middx. TW5 0PA, England for £ 1.50 plus postage. I think they still have this in stock."

Fritz Braun SAFCH # 220

(Editor's note: Ted Koppel had similar comments along with a more detailed listings of errors in the drawings. He has promised a more accurate drawing for a future issue.)

"For several years I have been working on comprehensive study of all the world's air forces insignia, lettering inscriptions, and abbreviations. This project covers all services, all countries, and all time periods. Although this is admittedly an almost impossible task, good progress is being made. However, much still needs to be done before this can be published in book form. Before making the color illustrations (there will be no photos in the final work) I will check all information so as to avoid repeating the numerous errors of previous publications. Small details, especially of complicated designs will be shown enlarged and information will be given about the time period during which the markings were used and their placement on the aircraft. The text will be brief and multi-lingual.

"To help me continue this project I need photos, slides, magazine clippings and information of all kinds, with special emphasis on the lesser known countries. As I have much material to trade, a mutual exchange would be most welcome, but I will also purchase material and will be pleased to receive material on a loan basis." *Fritz Braun* SAFCH # 220, Posener Strasse 20/o, D-8000 Munchen 81, West Germany. (Editor's note: As you can see from the first part of AFRICAN AIR FORCES INSIGNIA, which appears in this issue, Fritz is off to a good start on a very worthwhile project. I encourage all SAFCH members to do all they can to help.)

FOR SALE: IPMS-FINLAND MALLARI #1 to #12 - $9.00. AIRCAM LANCASTER and KITTYHAWK - $2.00 each. TBU BREGUET XIX - $2.00. LETECTVI + KOSMONAUTIKA #22 1966, #13-15 1976 - $2.00. Finnish decals Pe-2 and Hurricane - $2.00 each. All prices include postage. Jim Sanders, 27965 Berwick Dr., Carmel, CA 93923.

"We are a small society but because of the enthusiasm of our members we are able to accomplish things way out of proportion to our size. Not only are we able to publish unique information and photos but we also promote the spirit of international cooperation by encouraging research in areas requiring assistance from several countries. However, to most efficiently promote international friendship a few rules of common courtesy should be observed: (a) On the first letter, at least, to another member always enclose stamps or an IRC (and always to the editor). And, (b) all letters should be answered in a reasonable time" *Fritz Braun* SAFCH #220 (Editor's comment: I heartily agree with Fritz's comments, especially the one in parentheses. Another habit of Fritz's that I find particularly useful is that he ends all letters not containing an IRC with the words, "No reply necessary".)

"Thank you for the SAFO's so far. I have now received three copies. What a remarkable magazine! Never before have I seen so much information packed into such a small space. Keep up the good work" *Mick Burton* SAFCH #303.

"Concerning the article on Peruvian serials, I haven't looked through any books or magazines but I was filing some clippings and found some relavent information. First of all, there should be a listing of the pre-1960 serials, which are included for some of the fighters. The author still lists Stearman PT-17 '400' which certainly belongs to the days of B-25J '472' and F-47D '544'. '400' is now assigned to a Cessna T-41D (via Bob Picket), not the old PT-17. '383' is now a C-130 (actually a L-100-20). According to a Bell ad from summer 1975, '679' appears on a Bell 212 helicopter belonging to the Government but operated by the FAP; it has an 'OBE' prefix, but the numerals fit right into the helicopter sequence. I assume that the wheels and floats on the DHC-2 and -6 are interchangeable, as my photos show '373' and '392' in conditions opposite from those listed in the article. Despite the FAP title, Naval serials (5xx range) were included, to which I can add Grumman S-2E '547' and '548'. But, then there is the Navy Alouette III serialed 'N 410' - could this be from the pre-1960 system? By the way, what does 'wfs' mean?" *Ted Koppel* SAFCH #118.
(Editor's note: Add Mi-8 '678' and Navy Aztec '501'. And, "wfs" means withdrawn from service as a type; not to be confused with "w/o" which means written off and concerns an individual a/c.)

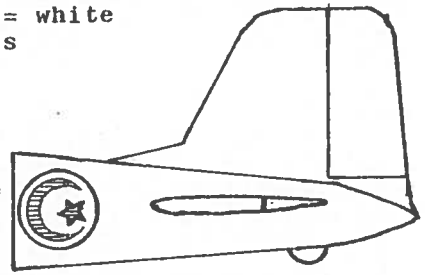
"I need details of the two-tone camouflage schemes used on the following Chinese aircraft: Wapiti IV, Avro 637 A.W. Atlas and A.W. 16." *Paul Mears* SAFCH # 270,"Homestead," Southampton Rd., Dibden, Nr. Southampton, Hants, SO4 5TE, England.

AIR FORCE INSIGNIA OF AFRICA BY FRITZ BRAUN

1.) TUNISIA (independent: 20.3.1960)
Air Force established in spring 1960.
First name: Armée de l'Air Tunisienne.
Now: Al Quwwat Alijawwiya Al Gioumohouria Attunisia.

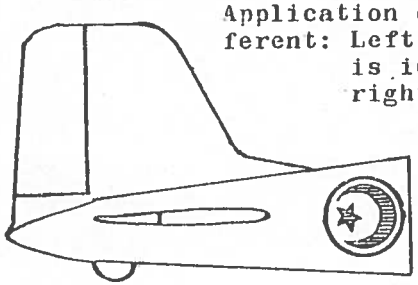
Colours: = red = white
Applied on: fuselage: yes
wings: 4x
fin: empty
rudder: "

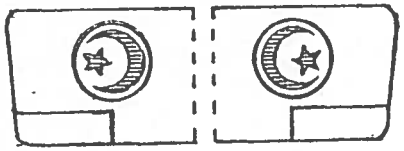
in use:
1960 to date





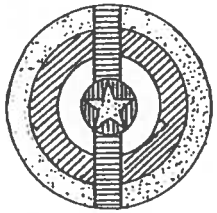
Application on the wings is also dif= ferent: Left upper and lower surface is identical, as it is on the right side as shown below:

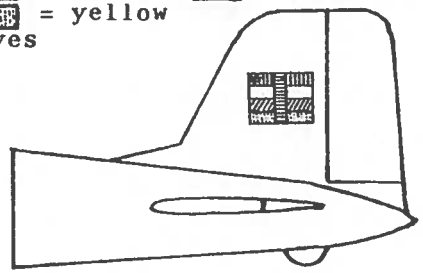




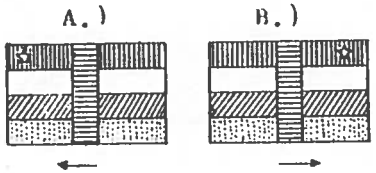
2.) CENTRAL AFRICAN REPUBLIC (independent 13.8.60)
On 5.12.1976 renamed Central African Empire.
Air Force since 1960.
Name: Force Aérienne Centrafricaine.
Colours: = blue = white = green
= red = yellow
Applied on: fuselage: yes
wings: 4 x
fin: yes
rudder: no

in use:
1960 to
date.



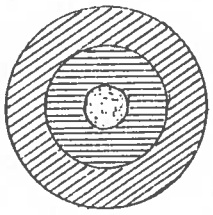


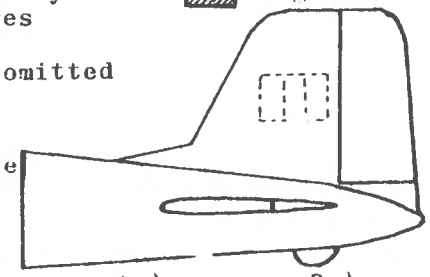
Fin flash= national flag.
As seen into the direction of flight:
A.) = on the left side
B.) = on the right side
The small star is yellow.



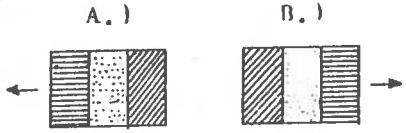
3.) GUINEA (independent 2.10.1958)
Air Force since 1958
Name: Force Aérienne de Guinée.
Colours: = red = yellow = green
Applied on: fuselage: yes
wings: 4x
fin: often omitted
rudder: no

in use:
1958 to date



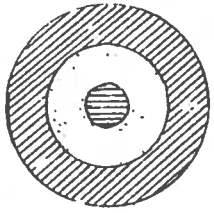


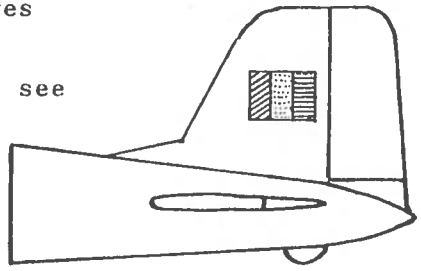
fin flash = national flag.
As seen into the direction of flight:
A.) = on the left side
B.) = on the right side



4.) MALI (independent 20.8.1960)
Air Force since 1960.
Name: Force Aérienne du Mali.
Colours: = green = yellow = red
Applied on: fuselage: yes
wings: 4 x
fin: yes
rudder: no, see note below!

in use:
1960 to
date.

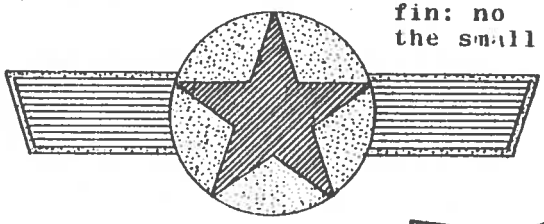


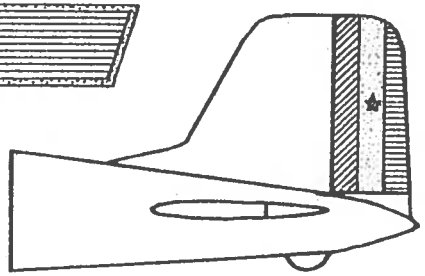


Fin flash = national flag, in this form since the 1st March 1961. Previously in the actual flag a black Kanaga symbol was added in the yellow field.
As seen into the direction of flight:
A.) = on the left side
B.) = on the right side
A non-standard rudder roundel is known (C-47).



5.) SENEGAL (independent 20.6.1960)
Air Force since September 1960.
Name: Armée de l'Air du Sénégal.
Colours: = green = yellow = red
Applied on: fuselage: yes wings: 4 x
fin: no rudder: yes,
the small star is green.

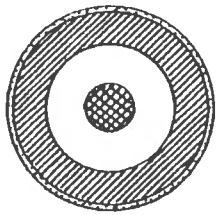


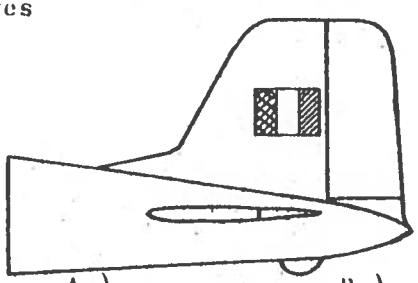


Rudder on both sides identical, with green stripe facing forward.
In use: Since 1960 to date.

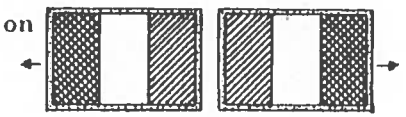
6.) IVORY COAST (independent 7. August 1960)
Air Force since summer 1960.
Name: Force Aérienne de la Côte d'Ivoire.
Colours: = green = white = orange
Thin outline of roundel and fin flash is yellow.
Applied on: fuselage: yes
wings: 4 x
fin: yes
rudder: no

in use:
1960 to
date.





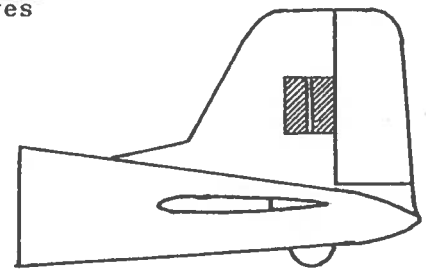
Fin flash = national flag, when seen into the direction of flight:
A.) = on the left side
B.) = on the right side



7.) RHODESIA (unilateral declaration of independence on 11.11.1965, recent green/white flag introduced on 11.11.1968, from which the present insignias were derived). Name: Rhodesian Air Force.
Colours: = green = white = gold (+)
= red (+) = black (+)
Applied on: fuselage: yes
wings: no
fin: yes
rudder: no

in use:
since end
of 1968 to
date.





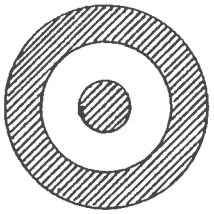
Some camouflaged aircraft are known without any national insignias, for instance on Hawker Hunter's.

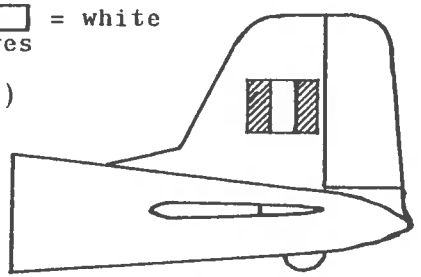


Lion detail: (+) = golden lion, red open mouth, thin black outlines, the tusk is white, also thinly outlined.
Note: On the left (port) fuselage side the lion is facing to the left, on the right (starboard) side however to the right side, thus into the direction of flight!

8.) NIGERIA (independent 1.1o.1960)
Air Force since 1963.
Name: Nigerian Air Force.
Colours: = green = white
Applied on: fuselage: yes
wings: yes
fin: yes (+)
rudder: no

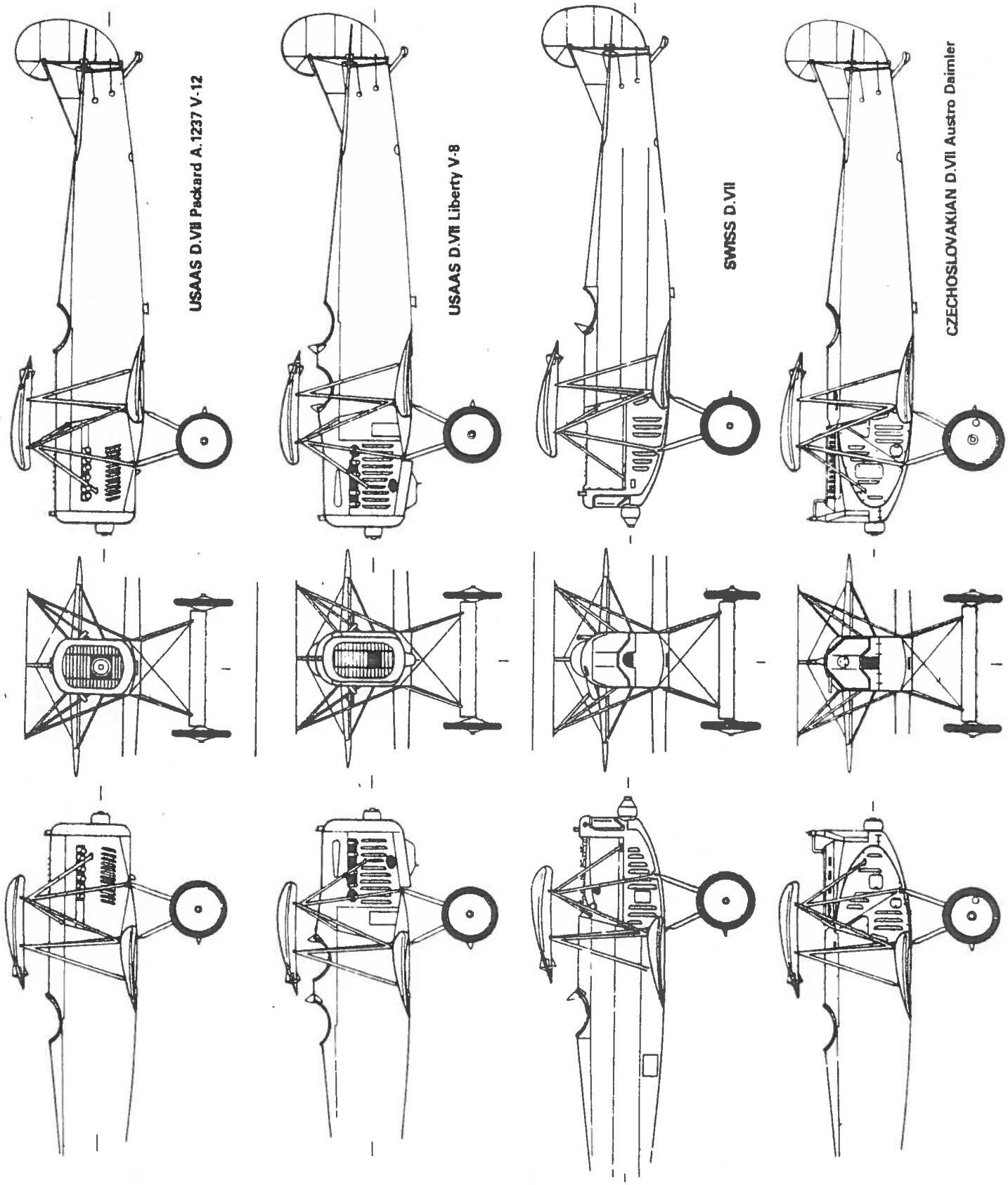
in use:
1963 to
date.



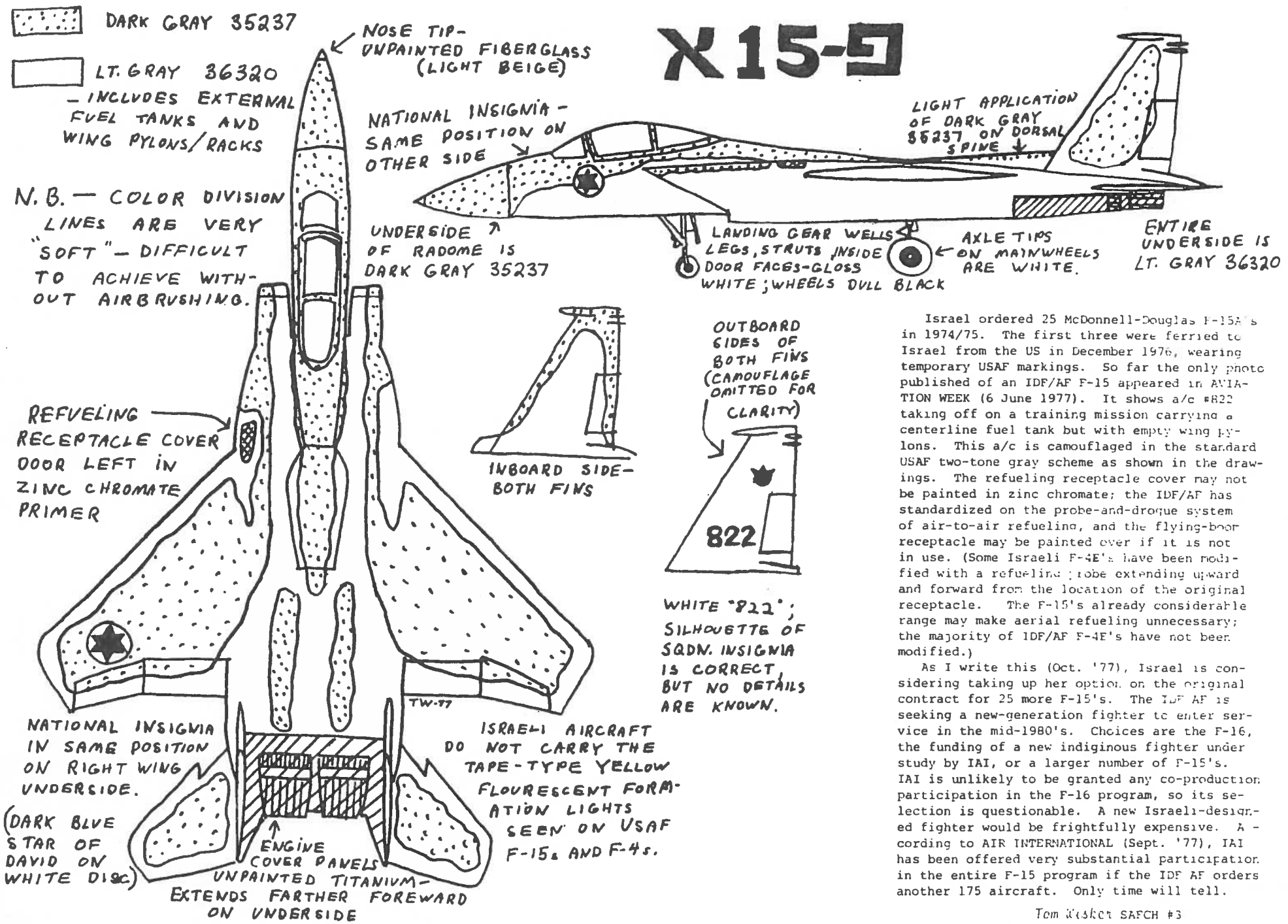


Some aircraft are known without fuselage roundels and no fin flash, but with roundel on the fin (MiG-17 and L-29 Delfin trainers, which is non-standard practice).

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AVIATION SOCIETY OF AFRICA.



These various Fokker D-VII engine installations were researched and drawn by Colin Owers (SAFCH #261) as part of a WARPAINT article for AVIATION NEWS. Reprinted here with the kind permission of AVIATION NEWS.



Israel ordered 25 McDonnell-Douglas F-15A's in 1974/75. The first three were ferried to Israel from the US in December 1976, wearing temporary USAF markings. So far the only photo published of an IDF/AF F-15 appeared in AVIATION WEEK (6 June 1977). It shows a/c #822 taking off on a training mission carrying a centerline fuel tank but with empty wing pylons. This a/c is camouflaged in the standard USAF two-tone gray scheme as shown in the drawings. The refueling receptacle cover may not be painted in zinc chromate; the IDF/AF has standardized on the probe-and-droque system of air-to-air refueling, and the flying-boom receptacle may be painted over if it is not in use. (Some Israeli F-4E's have been modified with a refueling probe extending upward and forward from the location of the original receptacle. The F-15's already considerable range may make aerial refueling unnecessary; the majority of IDF/AF F-4E's have not been modified.)

As I write this (Oct. '77), Israel is considering taking up her option on the original contract for 25 more F-15's. The IDF AF is seeking a new-generation fighter to enter service in the mid-1980's. Choices are the F-16, the funding of a new indiginous fighter under study by IAI, or a larger number of F-15's. IAI is unlikely to be granted any co-production participation in the F-16 program, so its selection is questionable. A new Israeli-designed fighter would be frightfully expensive. According to AIR INTERNATIONAL (Sept. '77), IAI has been offered very substantial participation in the entire F-15 program if the IDF AF orders another 175 aircraft. Only time will tell.

Tom Tasker SAFCH #3

THE FLAG RESEARCH CENTER

THE FLAG BULLETIN

The following article is reprinted from the Flag Research Center's FLAG BULLETIN for Spring 1972 with the kind permission of the Center's Director, Dr. Whitney Smith, and the author, Mr. Creighton Kern. It presents a somewhat different approach to a subject of great interest to most SAFCH members.

Mr. Kern recently mentioned that Dr. Smith made an error by including Fiji in the A.F. ensigns listing [probably because their flag happens to resemble the Commonwealth air ensigns] and that the Soviet one should have a hammer and sickle on star inside the sun. The cover illustration referred to (a large, detailed drawing of the current Rhodesian roundel) is not reproduced here due to the colored stock on which it was printed.

Anyone interested in corresponding on this subject with Mr. Kern may contact him at

25 South Monroe Street
Ridgewood, N.J. 07450, USA.

He is planning another article for THE FLAG BULLETIN.

Those with vexillogical leanings might wish to get in touch with The Flag Research Center

3 Edgehill Road
Winchester
Mass. 01890, USA.

Subscription for bi-monthly issues of the BULLETIN is $8.00.
(This article copyright 1972 by The Flag Research Center.)

It is interesting to note that in the intervening five years, there have been changes in the described insignia of Syria, Zaire, Singapore, Brunei, and Bangladesh (as well as the Hellenic Air Force ensign). Such a state of flux is one of the main points of the article, one that makes the study of this aspect of airforces history/heraldry so very interesting and even challenging. Natually, SAFO will also delve further into these matters.

--Ted Koppel

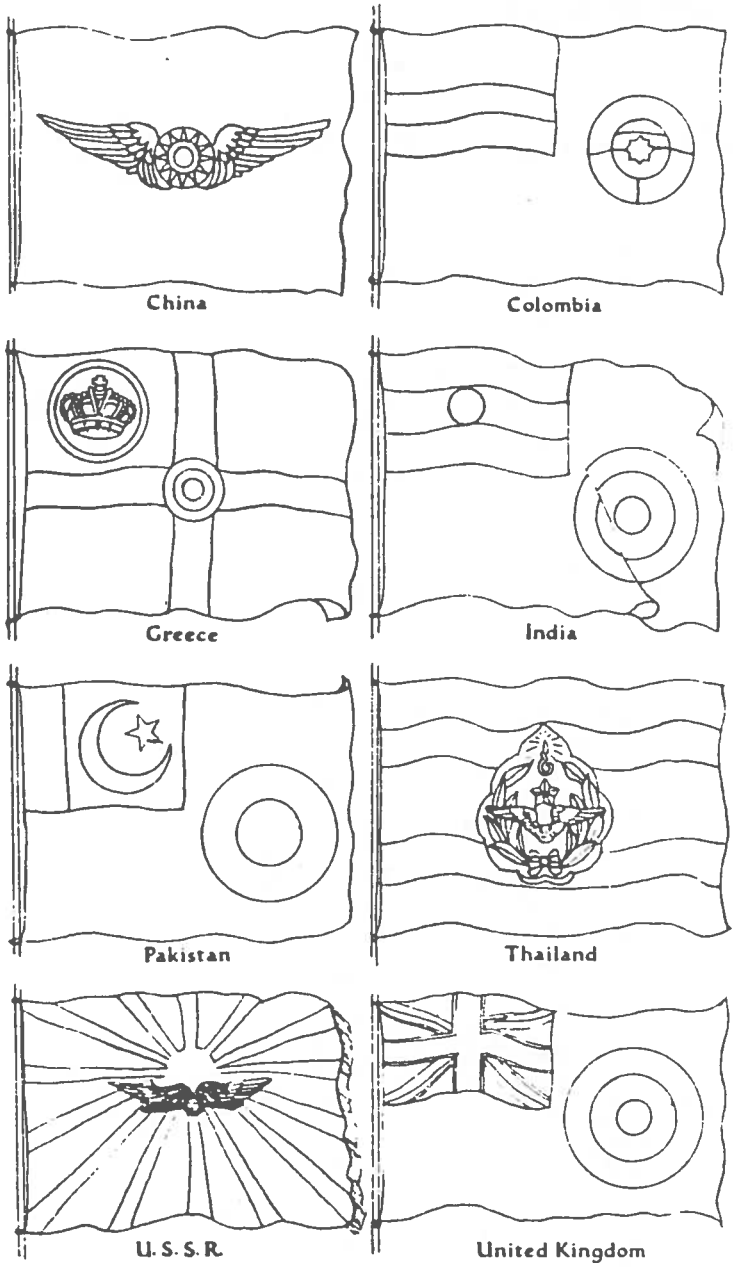


Fig. 1 MISCELLANEOUS AIR FORCE ENSIGNS

NATIONAL AIRCRAFT MARKINGS & FLAGS

by Creighton S. Kern

The study of military aircraft insignia is properly a branch of vexillology. This is so firstly because, almost without exception, military aircraft insignia are derived (in varying degrees of fidelity) from national flags. The military air arms of certain African nations, e.g., those of Mali (which uses no distinctive national markings) and Rwanda (which uses its civil air identification number, 9U-), lack military aircraft insignia despite the fact that their national flags provide ample inspiration for such. These are exceptions to the almost universal rule that military aircraft insignia are patterned after past or present national flags to one extent or another.

Secondly, military aircraft insignia appear on the ensigns of various air forces, usually--as was first done with the Royal Air Force of the United Kingdom--on a field of cerulean with the national flag in the canton. The air forces of Ceylon, Rhodesia, Fiji, Ghana, India, Kenya, Pakistan, royalist Iraq, Syria, Egypt, Libya, Burma, Colombia, Jordan, South Africa, and Saudi Arabia all follow the R.A.F. pattern. Only slightly different air force ensigns, also including the air force insignia, are flown by Australia, New Zealand, Kuwait, Zambia, Belgium, Greece, Poland, the Republic of China, and Guatemala.

Thirdly, at the dawn of military aviation, national flags were flown on planes until it became evident that this was impractical and then insignia were devised. Often, as in the case of the United Kingdom in the early days of the R.A.F., these insignia strongly resembled the national flag even more so than they do today. Finally, the French and German Marine Ministries in their flag books of 1923 and 1928, respectively; the National Geographic Magazine in its October 1917 and September 1934 articles on flags of the world; E. H. Baxter in his book National Flags (1934); and THE FLAG BULLETIN NEWSLETTER, etc. have all recognized that military aircraft insignia are within the purview of vexillology by including data on such insignia in articles on flags.

Changes in national flags often necessitate changes in military aircraft insignia. The emblem of the Corps d'Aviation d'Haiti was changed when the Haitian flag was

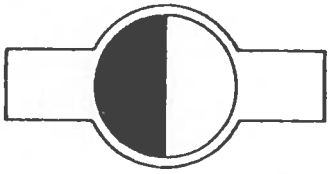


Fig. 2

HAITIAN AIR INSIGNE

redesigned from blue over red to black at the hoist and red at the fly. The new design (a black and red disc on a white background) is illustrated in Fig. 2. Similarly, when the Syrian, Sudanese, Congo-Kinshasa (now Zaire), People's Republic of the Congo (ex-Congo-Brazzaville), Peoples Democratic Republic of Yemen (ex-Southern Yemen), and Rhodesian flags were changed, alterations were in order for their military aircraft insignia. When Burundi received two military air transports from the French Armée de l'Air, an insigne had to be devised from the new republican flag.

Unfortunately, since the Sudan, the People's Republic of the Congo, and Burundi are vehemently anti-Western, their insignia are unknown to the author despite repeated attempts to ascertain them by every conceivable avenue. These governments seem to treat their aircraft insignia as military secrets, despite the fact that in times past such data have been made available even to hostile states.

Karl Fachinger reports that, because of the change in the Syrian flag, the design of the Syrian Air Force

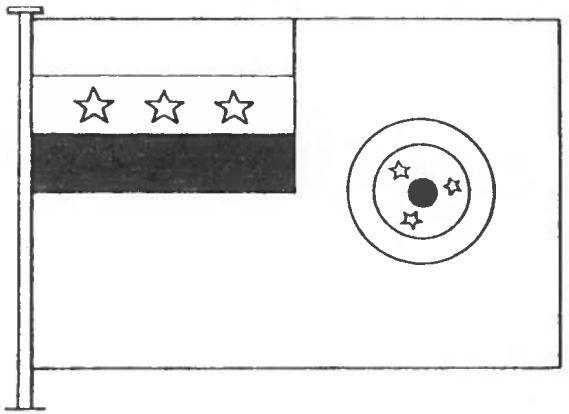


Fig. 3

SYRIAN AIR FORCE ENSIGN

roundel was changed to a red outer ring, a white inner ring with three green stars positioned as were the old red stars, and a black inner disc. Prof. P. C. Lux-Wurm saw this roundel (with an irregular star arrangement) on an air force color (Fig. 3) during a visit to Damascus in 1971.

When the Federation of South Arabia collapsed on 30 November 1967, the old South Arabian roundel and fin/flash (both: the Federation flag) were painted over in black as a temporary measure until a new design could be devised The designs finally adopted, according to Lars C. Stolt of

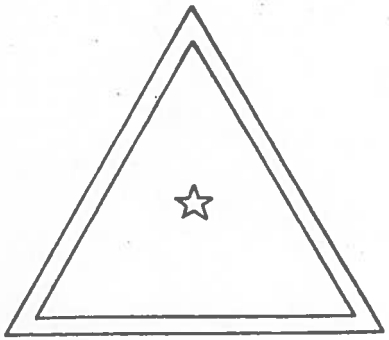


Fig. 4 P.D.R. YEMEN

Sweden, were an equilateral black-bordered light blue triangle (point upwards) with an extremely small red star in the center (Fig. 4) and a fin flash showing the flag of the People's Democratic Republic of Yemen (backwards to the non-Arab eye).

The Rhodesian insignia and air ensign remained the same after Rhodesia was unilaterally proclaimed a republic on 11 November 1965. The former Royal Rhodesian Air Force insignia were (1) a white spear overlapping an outer light blue ring, a narrow white middle ring, and a central red disc, and (2) a fin flash of light blue, white and red vertical stripes, the white being narrower than the other two colors. The light blue was derived from the field of the pre-republican Rhodesia national flag. The lone vertical spear was a vestige of the old Central African Federation insignia.

Until 1964 the Federation of Rhodesia and Nyasaland utilized three spears (the two outer spears slightly higher than the central one) on an R.A.F. roundel plus an R.A.F. fin flash. The three spears stood for the three parts of the Federation--Northern Rhodesia (now Zambia), Southern Rhodesia (now breakaway Rhodesia), and Nyasaland (now Malawi). The old Royal Rhodesian Air Force ensign had the Union Flag in the canton and in the fly, on a field of azure, the old insigne. The air force ensign of the Federation was similarly designed, only with the Federation insigne in the fly.

Shortly after the Rhodesian republic was proclaimed, on 2 March 1970, new insignia were introduced. The new roundel (for the fuselage only) is comprised of a golden lion passant guardant edged in black with a red mouth, holding aloft a golden tusk, all on a white disc enclosed by a bright green circle (front cover). The tusk-bearing lion is taken from the badge of Rhodesian Squadron 237 of World War II in which Ian Smith, the current Prime Minister, was one of the pilots. A similar badge was used as the crest of the British South Africa Company which ruled Rhodesia prior to 1923. The fin flash currently used by Rhodesia consists of two vertical bars of green separated by a narrow white strip, according to Lars C. Stolt.

Also according to Mr. Stolt, "Congo-Kinshasa" (the Democratic Republic of the Congo, now Zaïre) redesigned its military aircraft insignia to conform to its new flag. (Now another change will probably be made.) The blue roundel with the yellow star was kept, but sidebands, patterned after the stripes in the Congolese flag, were added to either side of the roundel (Fig. 5). Creation of a flag for the now defunct state of Biafra necessitated a distinctive insigne for its tiny fledgling air force, organized with the help of a Swedish count who had flown in the Russo-Finnish and Italo-Ethiopian wars. For this purpose the Biafran flag was painted on the fuselage just below the wing (according to Mr. Stolt).

When Singapore left the Malaysian Federation, on 9 August 1965, an insigne had to be devised for the Singapore Armed Forces Air Defence. A color photograph supplied by the Air Defence office reveals a red-white-red roundel (just like Peru's; Fig. 6) on the fuselage. Instead of a fin flash, the front part of the tail and the end of the fuselage are painted with a broad red vertical stripe. Wing markings, if any, are obscured in the photograph received of a BAC Strikemaster.

Occasionally military aircraft insignia are not affected by changes in national flags. Pictures of an Iraqi MiG-21 whose (Christian) pilot defected to Israel reveal that, despite several different national flags over the years, the Iraqi insigne has remained constant since the birth of the Iraqi air force in 1931--except for the fin flash, which is the current national flag in miniature.

Some air force insignia have even been derived from old flag designs. From 1914 to 1921, the Netherlands insigne was an orange roundel and from 1939 to 1942 it was a black-outlined orange triangle, point downward. From 1921 to 1939 and from 1945 to date the Dutch insigne has had a small orange disc on a roundel divided clockwise red, white, and blue. The orange in these insignia is based on the old Dutch flag, which had an orange stripe instead of a red one.

Another example of an insigne based on an old flag is that of Uruguay. Here the roundel is derived from José Gervasio Artigas's reputed flag (blue over white over blue with a red band going from the upper left to the lower right corners; see THE FLAG BULLETIN, Volume VI, Number 1-2, pages 32-33). The rudder stripes are the same as the flag.

Sometimes military aircraft insignia can be grossly misleading distortions of the national flag. The Zambian Air Force has a silver eagle (instead of an orange one as on the flag) because the design would look odd otherwise. The roundel is red, black, and green clockwise, with the eagle in the center and the whole emblem bordered in orange. (This information was provided by Flight Lt. Alan J. Cockle of the Rhodesian Air Force.) The Zambian Air Force ensign displays this roundel in the center of a light blue flag.

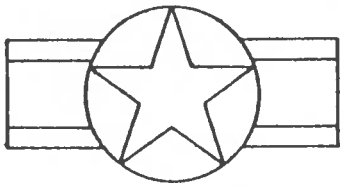


Fig. 5

D.R. CONGO INSIGNE

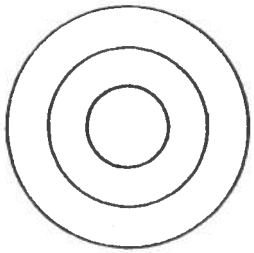


Fig. 6

SINGAPORE ARMED FORCES
AIR DEFENCE INSIGNE



ROYAL BRUNEI MALAY REGIMENT
HELICOPTER INSIGNE

The Commanding Officer of the Royal Brunei Malay Regiment reported to me that the insigne used on their helicopters was gold on a green background, the design corresponding to the one shown above. Mr. Harry Manogg brought to my attention the green-red-yellow roundel employed by the new Bangladesh Defence Force (Air Wing) on its six light aircraft, three or four Alouette III helicopters, and de Havilland Caribou transport. The colors, of course, derive from the original Bangladesh flag.

The flag of the Abu Dhabi Defence Force Air Wing is Cambridge blue (with proportions of 62:76), bearing the national flag as a canton and the Abu Dhabi roundel of red-white-yellow in the fly. Second Secretary Gerald W. Scott of the United States Embassy in Libreville states that Gabonese military aircraft bear the national flag, while President Bongo's personal plane displays the national coat of arms.

The Hawker Hunter jets and Whirlwind helicopters of the Qatari Security Forces Air Arm bear roundels and fin flashes based on the national flag and coat of arms. The Hunters have on their fuselages and upper wing surfaces a roundel with a central white disc, an inner beige circle that blends with the upper surface camouflage, and an outer maroon circle. On the Whirlwinds, the middle circle is the color of the aluminum on which it is painted. The fin flashes on the two types of aircraft are identical: on a black rectangle two crossed Qatari flags with the national coat of arms above. This information was provided by Third Secretary J. Martin of the British Embassy in Doha.

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AIRCRAFT OF THE SMALL AIR FORCES

AUSTRALIA

AESL Airtrainer CT/4		/75/76*	37
Airspeed Oxford (A25)		40/53	389
Auster A.O.P. (A11)	III	44/59	56
" "	V		2
" "	VI		2
" "	J5G		2
B.A.C. 111-200 (A12)		68/76*	2
Beechcraft 17 (A39)		41/45	3
Bell 47G Sioux (A1)		60/76*	65
" 206B-1, CAC CA-36 Jet Ranger		/76*	56
" Airacobra (A53)		42/43	22
" Iroquois (A2)	UH-1B	62/76*	24
" "	UH-1D		16
" "	UH-1H		24
Boeing Washington (A76)		52/56	2
" -Vertol CH-47 Chinook		/75*	12
Brewster Buffalo (A51)		42/43	17
Bristol 170 Freighter (A81)		49/67	4
" 171 Sycamore (A91)			2
" Beaufighter (A19)	I	42/51	72
" "	IV		32
" "	VIc		32
" "	X		82
" Bulldog II (A12)		30/40	8
C.A.C. Boomerang (A46)	CA-12	42/46	105
" "	CA-13		95
" "	CA-14/14A		1
" "	CA-19		49
" CA-15 (A62)		46/50	1
" Sabre (A94)	CA-26	54/75*	1
" "	CA-27		
" "	Mk.30/31		23
" "	Mk.31		20
" "	Mk.32		69
" Wackett Trainer (A3)	CA-2	39/40	2
" " "	CA-6	40/46	200
" Winjeel (A85)	CA-22	51/76*	2
" "	CA-25		62
" Wirraway (A20)	CA-1	39/59	40
" "	CA-3		60
" "	CA-5		32
" "	CA-7		100
" "	CA-8		200
" "	CA-9		188
" "	CA-16		135
" Woomera (A23)	CA-4	42/46	1
" "	CA-11		1
Cessna 180 (A98)	B	60/75*	8
" "	D		6
" "	E		4
" Airmaster C34 (A40)		41/45	1
Consolidated Catalina (A24)	PBY-5	40/52	68
" "	PBY-5a		46
" "	PB2B-1		7
" "	PB2B-2		10
" "	PB2B-2R		37
" Liberator (A72)	B24D	44/46	13
" "	B24J		144
" "	B24L/M		130
Convair 440 Metropolitan (A96)		55/70	2
Curtiss P-40 Kittyhawk (A29)	E	42/47	163
" " "	K		42
" " "	M		90
" " "	N		546
" Shrike (A69)		1943	10
D.A.P. Beaufighter 21 (A8)		44/57	364
" Beaufort (A9)	Mk. I	41/47	1
" "	Mk. V		40
" "	Mk. VI		40
" "	Mk. VII		60
" "	Mk. VIa		30
" "	Mk. VIII		520
" "	Mk. IX		46
Dassault Falcon (A11)		67/76*	3
deHavilland 9 (A6)		21/30	28
" 9A (A1)		21/29	30
" 50A (A10)	26/28 &	42/43	1
" 60 Cirrus Moth (A7)		26/40	
" 60G Moth (A7)		30/45	122
" 82 Tiger Moth (A17)		40/57	887
" 83 Fox Moth (A41)		41/45	4
" 84 Dragon (A34)		40/45	98
" 86 (A31)		39/45	8
" 89 Dragon Rapide (A3)		35/37	2
" " " (A33)		40/44	7
" 90 Dragonfly (A43)		42/44	1
" 94 Moth Minor (A21)		40/45	42
" 98 Mosquito (A52)	FB40	43/54	212
" "	PR40		2
" "	PR41		28
" "	FBVI		38
" "	PRXVI		23
" "	FII		1
" "	TIII		14
" "	T43		22
" 100 Vampire (A78)	F1	48/57	1
" "	F2		1
" "	F3		1
" 100/115 Vampire (A79)	F30,31,32		
		49/75*	80
" "	T33/35A		35
" "	T34/34A		6
" "	T35		69
" 103 Sea Hornet (A83)		48/50	1
deHavilland Australia DHA-G1 (A57)		42/50	2
" " DHA-G2			6
" Canada DHC-2 Beaver (A95)		54/64	5
" " DHC-3 Otter (A100)			2
" " DHC-4 Caribou (A4)		64/76*	31
Dornier Do-24T (A44)		42/44	6
Douglas Boston (A28)	A20A	42/46	9
" "	A20C		31
" "	A20G		28
" "	A20J		1
" C-47 Dakota (A65)		43/76*	124
" DC-2 (A30)		39/64	10
" DC-3 (A30)		39/40	4
" Dolphin (A35)		40/44	4
Fairchild 24 (A36)		40/45	4
Fairey IIID (A10)		21/2[illegible]	[illegible]
" Battle (A22)		40/45	364
Ford Trimotor (A45)		1942	2
G.A.F. Canberra (A84)	B.20	/76*	49
" "	T.21	/76*	7
" Mirage IIIO (A3)	IIIO(F) #48		
	IIIO(A) #52		
	IIID #10	64/76*	110
" Nomad 22		/76*	11
" Pika (A93)		51/53	2
General Dynamics F-111C (A8)		/76*	24
Gloster Meteor (A77)	F4	46/63	1
" "	T7		9
" "	NF11		1
" "	F8		97
Grumman S-2E Tracker		/76*	13
Hawker Demon I, II(A1)		35/42	64
" Hurricane (A60)		41/46	1
" -Siddeley 748 (A10)	T.2	67/72*	8
" "	C.2		2
" "	RAN		2
Junkers G.31(A44)		1942	3
" W.34(A44)		1942	
Lockheed Hercules (A97)	C-130A	58/76*	12
" "	C-130E		12
" Hudson (A16)	I	40/48	50
" "	II		50
" "	III		87
" "	IV		60
" Lightning (A55)		42/44	3
" Lodestar (A67)		43/47	10
" Neptune (A89)	P2V-4	51/76*	2
" "	P2V-5		10
" "	P2V-7		12
" Orion P3B (A9)		68/76*	11
" Vega (A42)		41/44	1
" Ventura (A59)	B34	43/46	20
" "	PV-1		14
" "	B.37		41

Macchi MB326H (A7) 68/76* 99
Martin Mariner (A70) 43/46 12
McDonnell-Douglas A-4G Skyhawk /76* 8
" " TA 4G " /76* 7
" " F-4 Phantom II(on loan from U.S.) 24
Miles Falcon Six (A37) 40/45
" Hawk Six (A37) 6 40/45
" Magister (A15) 38/40 1
" Merlin (A37) 40/45
Noorduyn Norseman (A71) 43/45 14
North American/C.A.C. Mustang (A68) P-51D 45/59 214
" " " " P-51K 84
" " " " XX 80
" " " " XXI 40
" " " " XXII 28
" " " " XXIII 66
" " Mitchell (A47) B-25D 42/46 30
" " " B-25J 20
" " NA-16 (A20) 38/41 1
" " NA-33 (A20) 38/41 1
Northrop Delta (A61) 42/44 1
Percival Hunting Jet Provost T2 (A99) 1
" " Prince (A90) 50/61 3
" " Proctor (A75) 45/47 1
" " Vega Gull (A32) 40/46 2
Pilatus Turbo Porter (A14) 69/76* 18
Republic Lancer (A56) 42/43 8
Ryan STM (A50) 42/45 34
S.E. 5A (A2) 21/28 35
Short Empire Boat (C Class) 39/43 5
" F.5 (A11)
" Southampton (A11) 28/39 2
" Sunderland (A26) 44/47 6
Sikorsky S-51 (A80) 47/64 3
Sopwith Pup (A4) 21/25 11
Stinson Reliant (A38) 41/45 1
Sud Alouette (A5) 64/66 3
Supermarine Seagull III (A9) 26/35 9
" " V (A2) 35/46 24
" Spitfire (A58) Vc 42/45 245
" " F.VIII 251
" " H.F.VIII 159
" Walrus (A2) 39/47 37
Tugan Gannet (A14) 36/46 7
Vickers Viking (A82) 47/51 1
" Vimy (A5) 1
" Viscount (A6) 64/69 2
Vought Kingfisher (A48) 42/45 18
Vultee Vengeance (A27) I 42/45 99
" " II 122
" " IVA 23
" " IV 98
" Vigilant (A64)
Wackett Warrigal I 28/29 1
" " II 30/33 1
" Widgeon I 26/28 1
" " II 28/30 1
Waco YQC-6 (A54) 42/44 1
Westland Sea King Mk.50 (on order 1975) 10
" Scout /75* 2
" Wapiti I (A5) 28/43 > 38
" " IIA (A5) #6 36/43
" Wessex 31B /76* 27

BAHREIN

Westland Scout (Police Force) 73 2

BANGLADESH

Aerospatiale Alouette III 73 3
deHavilland Canada DHC-4 73 1
Mikoyan MiG-21F ? 10
" MiG-21UTI ?
Mil Mi-8 /75
Westland Wessex H.U. Mk.5 73 2

BELGIUM

Aerospatiale S.A. 313B Alouette II 72/76* 80
" S.A. 316 Alouette III 72/76*
" S.A. 330 Puma /w6* 3
Airspeed Oxford
Ansaldo A.300
Auster A.O.P.6
Avro 504K
" 504N(S.A.B.C.A.)
" 626 Perfect (S.A.B.C.A.)
" Anson
" CF-100
B.E. 2cs
Boeing 727QC /76* ?
Breguet Br.14
Bristol F.2B
" Sycamore
Britten-Norman BN-2 Islander
C.A.C. Centaur 4C/F2A
Caudron G.III
" G.IV
" Goeland
Dassault Falcon 20 73/76* 11
" Mirage (S.A.B.C.A.)5-BA 73/76*
" " " 5-BD 73/76* 16
" " " 5-BR 73/76*
" -Breguet-Dornier Alpha Jet (on order 1976) 33
deHavilland D.H.4
" D.H.9 13
" D.H.89 Mosquito N.F.30
" Dominie
" Dove 9
" Heron 1
" Tiger Moth
" Canada DHC-1 Chipmunk
Deperdussin monoplane
Dornier Do-27D 73/76* 11
Douglas C-47 Dakota /73/76* 5
" C-54 Skymaster, DC-6A /73/76* 4
Fairchild C-119F /73/75 38
" C-119G /73/75
Fairey Battle 18
" Feroce
" Firefly
" Fox
" Fox VI
Farman F.20
" F.40 /13
" F.60
" H.F.3
Fokker D.VII
" F.VII
General Dynamics F-16 (on order 1976) 116
Gloster Gladiator 37/ 22
" Meteor F.4
" " F.8
" " N.F.11
" " T.7
Hanroit H.D.1
Hawker Hunter F.4
" Hurricane
" -Siddeley 748 /76* 3
Hunting Pembroke /73/76* 12
Koolhoven F.K.56
Lockheed C-130H 73/76* 12
" F-104G /73/76* 70
" TF-104G /73/76*
" T-33A /73/76* 15
L.V.G.
Maurice-Farman M.F.13 8
" " M.F.14
Merlin IIIAS /76* 6
Miles Martinet
Morane-Saulnier M.S.35
" " M.S.230
Nieuport
" Type 10
" Type 11
" 27C
North American Harvard
Ollieslager monoplane
Percival Proctor
Piper L-18C /75
Ponnier
Potez XXV
" -Air Fouga C.M.170 Magister 73/76* 35
R.E. 8 22
Renard R.31 38

Republic F-84E Thunderjet
" F-84F "
" F-84G "
" RF-84F "
S.A.B.C.A. (Ansaldo) A.300/4 23/ 15
" (Avia) BH-21
" " BH-33 22
" (Avro) 504K 23/ 24
" (Brequet) Br.19 146
" (Fiat) C.R.42
" (Nieuport-Delage) 29C-1 23/ 30
Schreck FBA
Short 225D
SIAI-Marchetti S.F.260MB 73/76* 36
Sikorsky H-34A 73 4
" HSS-1 /76* 5+
" S-58C(Sud-Aviation) 73/76* 5
Spad
" 13
Sopwith 1½ Strutter
" Camel
" Pup
Stampe SV-4B
" -et Vertongen RSV 22/180 1
" " RSV 23/180 1
" " RSV 26/180
" " RSV 32/100
Supermarine Spitfire F.R.14 /54
" " L.F.9C /54
" " L.F.16E /54
Tyck monoplane
Voisin "Canon"
Westland Sea King Mk.48 (onorder 1976) 5

BIAFRA
(NIGERIA)

Bolkow Jr MFI-9 /75?

BOLIVIA

Aermacchi AT-26 Xavante(MB 326GB) /76* 18
Aerotec T-23 Uirapuru 75/76* 18
Beechcraft AT-11, C-45 73/76*
" AT-17
Boeing B-17G Flying Fortress
" -Stearman PT-17 Kaydet
Brequet 19A-2
Caudron C.97
Cessna 172, T-41D Mescalero 73/76* 6
" 185 73/75* 6
" 210 Turbo Centurion /76* 2
" U-17 /75*
Convair 440 73/76* 6
Curtiss Falcon
" Hawk IA
" -Wright CW-19R
" " CW-22
" " Osprey
Douglas C-47 73/76* 12
" C-54 73 1
F.M.A. I.A.58 Pucara (on order 1976) 18
Fokker C.V-C
Grumman OA-9
Hiller OH-23C,D 73/76* 3
Hughes 500M 73/76* 12
IAI 201 Arava /76* 5
Interstate L-8
Junkers Ju-86
" W.34
Lockheed C-130 (on order 1976) 2
" T-33A-N 73/76* 13
Morane-Saulnier M.S.139
North American F-86 /76* 4
" " NA-16-3,AT-6D,T-6G 73/76* 23
" " P-51D(Cavalier) 73/75* 10
" " T-28A (10)? 73/76* 5
Republic P-47D
Ryan PT-16
Stinson 105 Voyager
Vickers 143
" Vespa III 29/
Vultee BT-13 Valiant

BRAZIL

Aermacchi MB326GB /73/76*112
Aeronca L-3 40
Aerospatiale S.A.341 Gazelle(on order 1976) 30
Aerotec AT-26 Xavante '76*100
" T-23 Uirapuru /73/75* 70
Avro 504 12
" 626
B.A.C. 111 /73/76* 2
Beechcraft AT-7 15
" AT-11 /75* 10
" C-45 /73 8
" D-17A
" UC-43 31
Bell 47G,J /73/76* 60
" 206A /73/76* 18
" UH-1D,-1H /73/76* 36
" SH-1D /73 5
Bellanca Pacemaker
Bleriots 5
Boeing 256 14
" 257 9
" 737 /76* 2
" B-17G Flying Fortress 5
" F4B-4
Borels 2
Bossi 3
Brequet 14A-2
" Br.1150?
Caudron G.IV
Cessna O-1E /73/75*
" T-37C /73/76* 50
" UC-78 33
Convair PBY-5A /73/76* 8
Curtiss Hawk 75A
" P-40D 40
" training seaplane 12
" -Wright C-46 /75*
" " Osprey
Dassault Mirage IIIDBR 73/76*
" " IIIEBR 73/76*16
deHavilland Fox Moth
" Gipsy Moth
" Tiger Moth
" Canada DHC-5 71/76* 24
Douglas A-20 31
" B-18 Bolo 2
" B-26 Invader (On Mark) 15
" C-47 /73/76* 56
" C-54 /73 5
" DC-6B /73/75 4
Embraer EMB-110(C-95) 80
" EMB-111MR (on order 1976) 12
F.5L 12
Fairchild C-82 Packet 12
" C-119G /73/75 12
" PT-19 190
" UC-61 1
" -Hiller FH1100 73/75* 6
Fairey Gordon
Focke-Wulf Fw 44J Steiglitz
" " Fw 58B Weihe
Fokker S-11 Instructor(L.M.) /75 100
" S-12 /73 70
Gloster Meteor F.8 62
" " T.7 10
Grumman HU-16A /73 12
" S-2A,E,CS2F-1 /73/76* 13
" SA-16A Albatross 75/76* 13
Hawker Siddeley H.S.125 /73/76* 10
" " H.S.748 /73/76* 12
Henri Farman
Hughes 259, TH-55 73/75* 9
Lockheed A-28
" C-60 8
" C-66 1
" C-130E, RC-130E /73 12
" P2E /73/76* 10
" P2V-7 Neptune /75
" P-3E?
" T-33A /73 15
" Vega B-34 1
McDonnell-Douglas A-4F 73 15
Morane-Saulnier M.S.230

Muniz M-7
" 1-9
Neiva C-42 /73
" L-42 Regente /73/76*110
" (T-25) IPD-6201 Universal /76*150
Nieuport
Noorduyn C-64 Norseman 17
North American AT-6 125
" " B-25 25
" " NA-44
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" " T-28C 73 18
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" V-11GB
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" " Fw58 Weihe
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" Il-10
" Il-12 73 6
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" Il-18 73/75 4
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" " MiG-17 73/76*132
" MiG-19 73/76* 36
" MiG-21, -21UTI 73/76* 60
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" Mi-4 /73/76* 60
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" -104
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" Yak-11 /73
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" U-17A 73 10
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" Canada DHC-1 73/76* 10
" " DHC-3 73/76* 6
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Hawker Sea Fury F.B.11 57/
" " " (2 Seater) 57/ 3
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Kaman HH-43B 73/76* 9
Kawasaki-Bell 47G,KB-47G 73/76* 13
" -Vertol KV-107 73 3
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" " Mk.18 55/

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" 206A 73 4
" 212, UH-1N 73/75 2
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" T-41 /76* 15
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" C-47,AC-47 /73/76* 18
" C-54 73 1
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" FD-25B 54/
Helio AU-24A 73/76* 14
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" " T-28D 73/76* 20
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